



WORKS ISSUED BY

The Bakluyt Society.

DANISH ARCTIC EXPEDITIONS, 1605 TO 1620.

BOOK I.—EXPEDITIONS TO GREENLAND, 1605 TO 1612.

DANISH

ARCTIC EXPEDITIONS,

1605 TO 1620.



IN TWO BOOKS:

BOOK I.—THE DANISH EXPEDITIONS TO GREENLAND IN 1605, 1606, AND 1607; TO WHICH IS ADDED CAPTAIN JAMES HALL'S VOYAGE TO GREENLAND IN 1612.

BOOK II.—THE EXPEDITION OF CAPTAIN JENS MUNK TO HUDSON'S BAY IN SEARCH OF A NORTH-WEST PASSAGE IN 1619-20.

Boited, with Notes and Introductions,

ВY

C. C. A. GOSCH.

BOOK I.

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EDITOR'S PREFACE.



N several previous volumes, the Hakluyt Society has published new editions of the original accounts of all the English voyages in search of a North-West Passage to India which were undertaken

between 1576 and 1632, when, after the return of Foxe and James, the search was discontinued for a considerable period. These voyages form a distinct and connected series. Between the years indicated, only one expedition was sent out with the same object from any other country than England, viz., the Danish Expedition to Hudson's Bay under Jens Munk in 1619-1620; and inasmuch as that expedition was piloted by Englishmen and was intended to follow up the results obtained upon some of the English voyages, it may fairly be looked upon as closely connected with the latter. It seemed desirable, therefore, to complete the Society's series of works relating to the expeditions in question by

adding an English version of Munk's narrative of his voyage. There appeared so much the more occasion for doing so, as Munk's book, which was published in Danish in 1624, had never been translated into any other language, and its contents, which are interesting in many respects, were known to the world at large only through incomplete and unreliable abstracts. On the initiative of Mr. Miller Christy, the editor of the last English voyages viz., those of Foxe and James, it was accordingly arranged that an English version of Munk's Navigatio Septentrionalis should be issued by the Society under the joint editorship of Mr. Christy and Mr. E. Delmar Morgan, as was announced at the time.1 At a very early stage, however, the last-named gentleman offered to retire; after which, I was invited by the Council to take his place, which I had much pleasure in doing.

Shortly after, it was decided to join to Munk's narrative the accounts of James Hall's voyages from Denmark and England to Greenland in 1605, 1606, 1607, and 1612. New editions of at least the first two of these voyages were, indeed, called for by the fact that a very considerable amount of fresh material for the elucidation of Hall's discoveries had come to light, but had, as yet, been utilised only to a small extent.

In one respect, the arrangement adopted was note altogether appropriate: viz., in so far that the voyages

¹ See Miller Christy's Voyages of Foxe and James, p. liii, note.

in question had totally different objects from that of Munk, and could not be reckoned amongst those undertaken in search of a North-West Passage; but, from several other points of view, there appeared, nevertheless, to be not a little connection between at least the first three of these voyages to Greenland and that of Munk. They were in some respects fore-runners of Munk's expedition, and form with it a nosable chapter in the history of Danish Arctic enterprise. Nor were these Danish voyages to Greenland without connection with England and the English expeditions in search of a North-West Passage, seeing that the chief pilot, James Hall, to whom the credit of the discoveries made mainly belongs, was an Englishman; and that one of the vessels of the expedition was commanded by another Englishman, John Knight, who in the following year commanded one of the English voyages just alluded to. It may be mentioned, too, that the expedition of 1605 was commanded by John Cunningham, a Scotchman, who afterwards commanded one of the vessels on the second voyage.

As regards Hall's own voyage in 1612, its inclusion in the present work may seem less justifiable. It was neither a Danish voyage nor had it for its object (like the three preceding ones) the discovery of the lost colonies in Greenland. It was a purely English voyage, undertaken solely for commercial purposes. Moreover, portions of the two accounts we have of this voyage have already appeared in

one of the works issued by the Hakluyt Society.1 Nevertheless, it was felt that a new edition of these two narratives would not be out of place in connection with those of the Danish voyages. Not only did Hall on this occasion supplement his discoveries made on the previous voyages, but the accounts of the voyage of 1612 will be found to assist materially in elucidating those of the expeditions of 1605 and 1606. In many respects, the voyage of 1612 was a continuation of the earlier ones, and the accounts of the former are only in part intelligible to readers who are not familiar with the accounts of the latter. Furthermore, by joining together the accounts of all the voyages to Greenland in which Hall took part, it has been possible to collect in one place all that is known of the life and work of a man who occupies a very honourable place amongst early English Arctic explorers.

The present work consists, therefore, of two distinct parts, or "Books", each constituting a volume, with its own index, and so far complete in itself.

Book I contains reprints from Purchas his Pilgrimes (1625), of Hall's own accounts of the voyages of 1605 and 1606, and of Baffin's account of the voyage of 1612; as well as a reprint, from Churchill's Collections of Voyages and Travels, of Gatonbe's account of the latter voyage. To these are added *

¹ The Voyages of William Baffin, edited by Sir Clements Markham (Hækluyt Society, 1881).

another account of the voyage of 1605 by Hall himself, accompanied by maps, now printed for the first time, from a manuscript in the British Museum; and translations of two Danish accounts of the voyages of 1605 and 1606. There are also two Appendices, treating respectively of an old chart ("The Stockholm Chart"), which is of much interest in connection with Hall's Voyages, and of "Buss Island".

Book II contains a translation of Jens Munk's Navigatio Septentrionalis, made from the edition of 1624, corrected by means of Munk's original manuscript. This is followed by a Commentary, containing, partly, explanatory matter which would otherwise have had to be given in footnotes of inconvenient length, partly a discourse on Munk's map, which has not hitherto received the attention it may justly claim.

That the work, thus extended in scope, now appears under my name alone is due to the fact that Mr. Christy, who had initiated it, decided to withdraw from participation in the editorship before the completion of the work. As the latter, however, was far advanced at the time, it becomes my agreeable duty here to record the part borne by Mr. Christy during the time of our joint editorship. Partly by mutual arrangement, partly by force of circumstances, the main part of the literary work fell to my share, whilst Mr. Christy was good enough to undertake the more technical business of seeing the work through the press,

arranging the execution of the illustrations, etc. But he has not by any means confined himself to this. Besides Appendix B, containing an exhaustive discourse on the imaginary "Buss Island", Mr. Christy has contributed to Book I that part of the Introduction which treats of the English expedition of 1612 (pp. cii-cxi), as well as most of the notes to Gatonbe's and Baffin's accounts of that voyage, and a number of notes to other portions of the book, mostly containing information on questions of biography and natural history, or referring to obsolete words and various defects in the texts of Hall's narratives, which were reprinted from Purchas under Mr. Christy's special superintendence. To Book II Mr. Christy has contributed the second chapter of the Introduction, containing a Notice of the English Voyages which preceded Munk's (pp. lxviii-xciv); furthermore, the map of Churchill Harbour, and some notes. To Mr. Christy's active inquiries are due besides several interesting extracts from English records. With these exceptions, the editorial matter is my own work; at the same time, it is a matter of course that, in what each of us has written, we have benefited by mutual assistance in minor matters, in which respect my indebtedness cannot but be the greater considering the proportionate bulk of our parts.

It may be mentioned in this connection that the large chart of Hudson's Bay and Strait placed at the end of Book II was originally prepared for, and used in Mr. Miller Christy's Voyages of Foxe and

James; but as it equally well serves our purpose here, it is used again, with slight alterations, Munk's route being revised.

Several English correspondents, whose names are mentioned in the proper places, have kindly afforded information and assistance.

It will be easily understood that a considerable proportion of the information required for the elucidation of the voyages edited in these volumes had to be obtained from Denmark, and that I am, consequently, much indebted to friends and correspondents there.

I have much pleasure in recording my best thanks to M. Bruun, Principal Librarian of the Royal Library at Copenhagen, for the loan to London of a copy of the rare first edition (1624) of Munk's book; to Dr. Birket Smith, Principal Librarian of the University Library at Copenhagen, who kindly made arrangements for me to copy Munk's original manuscript at a time of the year when the Library was closed to the public; to M. Jörgensen, Keeper of the National Archives in Denmark, for special facilities of research; and to Count Snollsky, Principal Librarian of the Royal Library at Stockholm, for permission to have a copy executed of the interesting old chart which I have described as "the Stockholm Chart". I am, moreover, beholden to all these gentlemen, as well as to Dr. Wieselgren, Sub-Librarian at Stockholm, and others, for information and kind assistance of various kinds. Finally, I am under great obligations to

Capt. J. A. Jensen, of the Danish Royal Navy, who, during the years 1878, 1879, 1884 and 1885, partly executed, partly superintended, the mapping of the West Coast of Greenland between lat. 64° and 68°, and has kindly placed at my disposal a large number of maps and map-sketches of various localities on that coast, which were visited by Hall. These have been of very great use, and, with Capt. Jensen's permission, three of them have been reproduced in the first volume.

C. C. A. Gosch.

August, 1897.







THE

DANISH EXPEDITIONS

TO

GREENLAND,*

IN

1605, 1606, AND 1607;

TO WHICH IS ADDED

CAPTAIN JAMES HALL'S VOYAGE TO GREENLAND IN 1612.

[From Purchas His Pilgrimes, Churchill's Collection of

Voyages and Travels, and a Manuscript in the

British Museum.]



INTRODUCTION.

I.—On the Original Accounts of the Voyages to Greenland in 1605, 1606, 1607, and 1612.



NTIL within the last fifty years very little was known about the Danish Expeditions to Green land in 1605 and 1606, beyond what could be learned from the accounts of James Hall (who

acted as pilot), which were published in *Purchas his Pilgrimes*.¹ In several respects, however, these narratives are defective, notably as regards the geographical exploration of the coast; and, if it is now possible to give a fairly-complete account of these voyages, this is due to the fact of important fresh material having come to light within the period named.

ing a History of the World, in Sea Voyages and Lande Trauells, by Englishmen and others." * * * By Samuel Purchas, B.D. (London, 4 vols., fcp. fol., 1625), vol. iii, pp. 814-826.

The foremost place amongst these new sources of knowledge must be conceded to Hall's original Report to the King of Denmark on the voyage of 1605, of which a copy is preserved in the British Museum.1 The chief importance of this document lies in the fact that it is accompanied four maps, drawn by Hall, which constitute the earliest attempts at anything like accurate mapping of any portion of the west coast of Greenland, and which, as such, are extremely creditable to Hall. These maps not only illustrate the Report, but, as regards one portion of the voyage, they really represent nearly all the information's concerning it that we have from Hall himself. After having reached a convenient port in Greenland, where the commander of the expedition might wait for him in safety, Hall set out in a smaller vessel in order to explore the coast northwards, as far as he could in the course of three or four weeks; but, in the "Report", he gives no description at all of this portion of the voyage, or of its result, referring merely to his maps, from which alone, therefore, the reader is left to gather where Hall went and what he discovered. These maps do not accompany the accounts published by Purchas: hence the great importance of their having come to light. Mr. Clements Markham who, in 1881, first drew attention to the existence of this manuscript and the

¹ MS. Bibl. Reg., 17A, xlviii, p. 261.

maps in his work on William Baffin¹; but, as they came under his notice only in connexion with the fact that Baffin served under Hall in 1612, Mr. Markham did not enter further on the subject. His observations, however, led to the manuscript and the maps being copied for the use of the Danish Commission for the Exploration of Greenland, and the maps were reproduced (though mostly on a reduced scale) in an interesting paper by Mr. K. J. V. Steenstrup, on the ancient Scandinavian settlement in Greenland, published in 1889.² Hall's report itself was not then published, and is now printed for the first time in the present volume, accompanied by full-size reproductions of the maps.⁸

¹ The Voyages of William Baffin, 1612-1622 (Hakluyt Society, 1881), pp. xxi, 17, and 23.

² Om Österbygden, in Meddelelser om Grönland [Reports on Greenland], vol. ix (1889), p. 1-51. These Meddelser (which will be often quoted in the sequel) constitute the regular organ of the Commission for the Exploration of Greenland, and contain a vast amount of information on that country.

The manuscript consists of 21 leaves, small quarto, and is bound together with others of a similar size. The watermark of the paper, as far as visible, represents two towers. The leaves have no original numbering or pagination, but the second to the twentieth leaf have subsequently been marked in pencil, 1 to 19, by some librarian. All the pages are bordered all round by fine red double lines, which extend beyond the corners where they meet to the edges of the paper, except on the pages prepared for maps, on which the border-lines are not so continued. The first leaf has no writing on it, and the report commences on the front page of the second leaf, without any title-page or heading. The text is closely and very neatly written in the same hand all through, but whether by Hall himself, or by a professional scribe

How this document (which, one would think, would naturally have found a place in some Danish

-which latter seems to be the more probable-cannot be decided in the absence of even the smallest authenticated scrap of Hall's own handwriting. The text extends over 11 pages. ending at the foot of the front page of the seventh leaf, the back of which does not exhibit any writing. On the front page of the eighth leaf is written in red:-"The Demonstration of the fordes, rivers, and the coste", and on the reverse of this leaf the first map is drawn. The description of, or key to, that map occupies the opposite page (viz., the front page of the ninth leaf), on the back of which the second map is drawn. The tenth. eleventh, and front of the twelfth leaf are similarly occupied by maps and their descriptions, but the back of the last-named folio contains nothing of the kind, though it is prepared for a map, as are also the back pages of the remaining leaves, excepting the As, however, they have not been utilized, the manuscript ends virtually on the twelfth leaf. On all the pages intended for maps (13 in number), the rectangle formed by the border-lines is divided into quarters by black lines, and a compass is drawnrather carelessly—in the centre. On all of them, the fleur-de-lys (or "fly") of the compass has been originally drawn pointing to the right, but subsequently erased. On the eight last map-pages, it has been redrawn in the same position, over the erasure; but, on the first five of these pages, it has been replaced by another, pointing upwards. As regards the maps themselves, we refer the reader to our reproductions. As, however, these have had to be done in black only, in order to save expense, it should be noticed that the originals are coloured. They appear to have been originally drawn—the outlines at least—with a lead pencil, and afterwards blackened with ink. The water is tinted a pale dirty blue; the land, light green; the mountains, dark brown. addition to the border-lines, the reference-letters on the maps, as well as the corresponding letters in the descriptions, and the headings of the descriptions, are in red. The compasses of all four maps are coloured red, blue, and yellow; and the Royal Arms of Denmark on the fourth map are roughly, but, o s as far as it goes, correctly, blazoned in colours.

Archives) came to this country and found its way to the Royal Collection of MSS. is not known; but more than one way can be imagined in which this The most probable exmay have come about. planation is, perhaps, indicated by the fact that the MS. is prepared for more maps than the four The Report announces itself as written we have. in the year 1605—as, indeed, Hall's original account must have been, because the King would require an immediate report on the exploration of the coast, which formed a primary object of the voyage. But, as it is not at all likely that Hall would have had time then to elaborate a document like the one before us, the probability is that he submitted a preliminary account, accompanied by some sketches sufficient for the purpose, and that he afterwards, at his leisure, prepared a finished copy for presentation on some future occasion. Supposing (which is by no means improbable) that the sketches brought home from the first voyage were not quite sufficient for the purpose, Hall may, on the second voyage, have supplemented them, as far as the localities then visited were concerned; and he may have postponed the execution of the remaining maps until he should have visited the other places a second time, for which he would naturally expect to have an opportunity in 1607. As, however, in that year, he was brdered to proceed to a different part of Greenland, and as, after that, the expeditions were discontinued, Hall may never have been able to finish the maps; and, when his engagement in Denmark terminated.

soon after, he may have carried the document with him to England and even finished it here.¹

Whether a similar report on the second voyage ever existed is not known, but it is not probable, because the geographical exploration of the country was not, on that occasion, further extended.

A comparison between Hall's Report to the King and his account of the first voyage, as printed in *Purchas his Pilgrims*, shows that the latter, upon the whole, is fuller, containing a number of details which would interest a general reader, but which would not be in their proper place in a Report to the King, such as the names of the ships and their commanders, many details of navigation, etc. The principal addition is a so-called "Topographical Description of Greenland", evidently written as an entirely separate piece, a kind of appendix to the

It seems to me more probable ¹ This is Mr. Gosch's view. that an official report to the King of Denmark would be made in Danish, rather than in English, even though the reporter was an Englishman, and though the King is known to have had many other trusted English servants, who could at any moment have translated the report for him. I cannot, therefore, regard the interesting MS. in the British Museum as the actual original Report to the King. It appears to me more likely that the MS. was either Hall's first draft, from which a translation intended for the King (and now lost) was made, or a copy of his Report to the King which Hall retained for his own private use. It is quite possible, as suggested by Mr. Markham (Voyages of Baffin, p. xxi), that, whatever this MS. is, Hall retained it, and brought it with him to England, and presented it to King James; or it is just conceivable that it is a copy sent by the King of Denmark (Christian IV), as a matter of courtesy, to his brother-in-law King James.—M. C.

account of the whole voyage, which the editor, in an extremely clumsy manner, has thrust into the middle of it-viz., in the place where Hall's account of his excursion in the smaller vessel would have stood if he had given one. It seems as if Purchas had felt that something was wanting here, and had tried to fill up the gap by means of this piece. It has a separate heading and commences quite abruptly, without any connexion with the preceding; but the conclusion is worked up with the continuation of Hall's account of the voyage. Apart from these differences, and the one other particular point alluded to above, the agreement between the two accounts with regard to what is told, how it is told, and, not least, with regard to what is not told, is so close that the account printed by Purchas may properly be described as an amplification of the Report, done of course by Hall himself from his notes, and so far equally original, but with a view to publication, and very likely intended to be entrusted to Hakluyt, from whom Purchas most probably obtained it at the death of the former in 1618, as he did many other narratives.1 There is, however (as already mentioned), one very important difference between the account in Purchas and the Report, viz., that the former is not accompanied by maps, nor is there any mention of, or reference to, any such. *the two narratives had not, in other respects, been so closely alike as they are, there would have been

¹ See Purchas his Pilgrimes, vol. i, Preface to the Reader.

nothing particularly noteworthy in this fact. But, under the circumstances, it is remarkable that Hall, in this later account, should have, as it were, skipped his exploring excursion in the pinnace, exactly in the same manner as he does in the Report to the King, and yet not have referred his readers to maps, as he does in the Report. If he had not intended the account printed in Purchas to be accompanied by the maps, surely he would have given a description of this excursion, as of course he could easily have done. It is true that Purchas himself says that the account which he prints is "abbreviated" from the original, and in many places there is evidence of this abbreviation having been done with too little care. But it cannot be supposed for a moment that whoever executed this abbreviation would have left out what could not but be regarded as one of the most important portions of the narrative. It seems, therefore, most probable that Hall intended his account to be accompanied by copies of the maps with which his Report to the King was illustrated, and that his account originally contained references to them, similar to those contained in this last-mentioned document, but that Purchas (or whoever arranged the narrative for publication) suppressed the allusions to the maps, as he did not intend to publish the latter.

It is, of course, quite possible that Purchas may never have come into possession of the maps; but, in that case, we believe it must be assumed that the abbreviation of the accounts was not done by

him, because it seems to be proved by a certain passage in a note appended to the account of the second voyage that the person who brought Hall's narratives into the shape in which we now have them in Purchas was acquainted with the maps. The note in question (see pp. 79-80) consists of disjointed statements, evidently culled from Hall's unabbreviated narrative by somebody who appears to have considered that they ought not to have been omitted from the abstract, and, therefore, added them at the end. One of these statements is the following: "Bredaransies Ford is most northerly." Now the locality here alluded to was visited by Hall on his exploring excursion in the pinnace in 1605, and was shown on his map under the name of "Brade Ranson's Ford"; but it is not mentioned in his narratives, because in that of the first voyage nothing is said about the geographical results of the excursion, and on the second voyage the place in question was not visited. Whoever wrote this note must, therefore, have seen the maps; and, if any proof were wanted that this was not Hall himself, we have it in the corruption of the name, which can not reasonably be attributed to Hall. If Purchas wrote the note, he must have had this information from the map (IV, k); and, as he is known to have suppressed Baffin's map,1 he may have suppressed

¹ See Purchas his Pilgrimes, vol. iii, p. 847, note; also Markham's Voyages of William Baffin, p. liv.

Hall's also. At the same time, in favour of the supposition that he received the narrative in the state in which he printed it, we may adduce the consideration that, if he had himself collected these additional statements from Hall's original MS., he would probably have inserted them in the abstract in their proper places, instead of presenting them to his readers in such a crude form. In any case, whether Purchas or another wrote the note, this much is certain: That, not only was the abbreviation made and the note written, but the accounts of Hall, in their present form, and his maps were seen by persons interested in Arctic Research before 1612, because several of Hall's local names mentioned in these accounts (and particularly also "Bredrans's R.") appear, more or less corrupted, on the map published in 1612 by Hessel Gerritsz. The date may even have been earlier, because Gerritsz's map is generally (and no doubt rightly) supposed to be, in the main, a reproduction of Hudson's "card", which (apart from the portions discovered by Hudson himself) may be taken as representing his ideas of the results of arctic explorations previous to his own setting out in 1610. If those names were found on Hudson's "card" (as is quite possible), he must have had access to Hall's accounts, or to information derived from them. We have, however, no means of knowing whether those names were on the "card"; and it is, perhaps, more probable that Hessel Gerritsz put them on his map from information of his own, as the names mostly appear in a corrupted form, which can scarcely have been derived from Hudson's "card". The misspelling 'Bredrans R." of course points to the abovementioned note as its source; but another of the names ("Romborts R." for Ramelsfjord—on Hall's map "Romlesford") does not occur in Purchas.

In Purchas' work, Hall's accounts are accompanied by numerous side-notes, nearly all merely intended for reference. Of these, some seem due to Hall, because of the employment of the first person, as: "Our departure in the pinnace"; "We meet again with the *Lion*", etc.; but we have reproduced only a few of them, which convey additional information.

Next in importance to Hall's Report to the King of Denmark on the expedition of 1605, and the maps belonging to it, stands the manuscript Journal of Alexander Leyell, who was one of the crew of the pinnace in which Hall made his excursion northwards. Leyell's notes, short as they are, supplement, in a most fortunate manner, Hall's narrative, as will be shown more fully in the proper place.

A Journal similar to that of Leyell, but relating to the second voyage in 1606, has also been preserved. It was kept by Hans Bruun, who was in command of one of the vessels employed on that occasion.

A third contemporary manuscript, which refers to the expedition of 1605, gives a short account of the Greenlanders who were at that time brought down to Denmark. It is anonymous, and is of little importance for our present purpose

Finally, we have to mention a manuscript chart of the beginning of the seventeenth array, which is of interest in connexion with these expeditions, because all the principal names bestowed by Hall on various localities in Greenland in 1605 are inserted upon it, even such as are not mantioned either in the accounts printed by Purchas or on Hessel Gerritsz's map, but only appear on Halls own map of the coast explored by him. We shall allude to this chart hereafter as the "Stockholm Chart"; but, as the observations we have to make on it are rather lengthy, we have printed them in form of an Appendix (A), to which we refer the reader.

It is curious that these four documents, like Hall's Report to the King, are not preserved in Denmark. They all belong to the Royal Library at Stockholm, forming part of a volume of manuscripts which is generally supposed to have been carried away from Denmark, together with other literary treasures, by King Carl X Gustaf during his war with Denmark in 1658-59.1

¹ The four MSS. above mentioned are bound, together with several others, in a parchment cover dating from the seventeenth century (Catalogue-mark, K. 29). This is marked on the side "No. 15". On the back, near the top, is written: Karl Knuds[o]ns | Och Grönlands | histori[e] mscr. | II. Farther down, is written: Antiquitets Coll. s. sign K 29, which latter inscription is thought to be the only portion dating from the period subsequent to the removal of the volume to Sweden. On the first flyleaf is written: Antrox Lymvicj Cimbrj 87, apparently indicating that the volume

The three first-named documents were made use of for the first time by Dr. C. Pingel, and published in 1845 in his valuable paper entitled Nyere Reiser til Grän (Modern Voyages to Greenland). Complete translations of the Journals will be found in the following pages, partly in our general account of these two voyages, partly in our notes to Hall's accounts; but, as they consist entirely of short accounted entries, it has not been thought necessary to print them separately and as a whole amongst the texts. Nor have we seen sufficient reason for translating the account of the Greenlanders. The Stockholm Chart was brought to

⁽or, at any rate, the first manuscript contained in it) once was the property of a native of Jutland, named Anders Lemvig, which is a Danish name. Leyell's Journal consists of six leaves (21 by 16.5 cm.), of which the first only contains the following title: Sandferdigh Beretningh om thenn Groenlandesz reise som Konng. May. 3 Skiff giorde Anno 1605. Alexander Leyell. ("A truthful Account of the Voyage to Greenland which three of H.R.M. Ships made in the year 1605. A. L.") This is repeated as a heading to the Journal, which commences on the second leaf. The last leaf contains only four and a half lines of text, besides a note signed Wyllm Hendricks if Egebeck. The handwriting is the same all through, neat and firm, excepting the note at the end and another in the margin of the second page of the fourth leaf, which are both in the same, much inferior hand. Journal is written on three leaves (20.7 by 16.8 cm.), in a less good hand than Leyell's. It has neither title-page nor heading. The anonymous notice of the Greenlanders occupies three leaves. With regard to the Stockholm Chart, we refer the reader for particulars to Appendix A.

¹ In *Grönlands historiske Mindesmærker*, vol. iii, pp. 625-794. Copenhagen (The Royal Society of Antiquaries), 1845.

light in 1886 (though the bare fact of its existence was known before) by Mr. K. J. V. Steenstrup, of Copenhagen, who wrote an article on it in the periodical *Ymer*, accompanied by a reproduction of the Chart. As, however, this periodical will not be accessible to the majority of our readers, we have caused a new facsimile reproduction to be made for the present volume.

Until the discovery of Hall's Report and the publication of his maps and the two Journals abovementioned, the history of the two first Danish expeditions to Greenland was, as already stated, chiefly known from Hall's accounts in Purchas's work: but it must not be inferred that no contemporary Danish accounts were known to exist. As a matter of fact, two were known: one by Jens Bielke and the other by C. C. Lyschander, both of them well-known Danish authors, and both of them unmistakeably supplied with information by personswho had taken part in the expeditions. But. unfortunately, both of these narratives are popular compositions in verse, aiming rather at the entertainment of the reader than at conveying accurate information; and, though the geographical exploration and mapping of the coast are mentioned, no details of a precise nature are given. We have, of course, adduced whatever these treatises contain that

¹ Ymer, 1886, Stockholm (Svenska Sällskapet för Anthropologi och Geografi [The Swedish Anthropological and Geographical Society]) p. 83-88.

is serviceable for our purpose; but, as this is only very little in comparison with their bulk, we have not translated them in full.

Bielke's Relation om Grönland, as it is called, treats only of the Voyage of 1605, and has never been published. Lyschander's account is to be found in his printed work, Den Grönlandske Chronica, which was published in 1608² and reprinted in

¹ The original manuscript is preserved in the Royal Library at Copenhagen (Gl. Kgl. Samling, No. 996), and forms part of a stately volume (30 by 20 cm.), bound in blue velvet with gilt edges. This contains 39 leaves, besides the flyleaf, of which Bielke's Relation occupies 29.

² Den Grönlandske Chronica: Huorudi Kaarteligen beskriffuis, Huorledis Landet i fordum tid | er först funddet : Besæt met Indbyggere | haffuer ligged til Konggernis Fadebuer vdi Norrig | Anammet den Christelige Tro: Været vndder de Erchebispper aff Trundhiæm och haffd sine egne særdelis Bispper: . . . | met Stormectige . . . konning Christian den fjærddis . . . trendde lycksalige Togh. De trændde förste giordde paa den Suduæste side af Landdet. Anno Christi 1605 oc 1606. Dend Tredie stillet effler Erichsfiord oc dend fordum Norske Seyladtz, 1607. Alle Danske oc Nordbagger til Ære och Amindde. Prendtet vdi Kiöbenhawn | Aff Benedicht Laurentz. 1608. 8°. Title, two prel. leaves, A-Z iij; unpaged. The full title reads thus in English:—The Greenland Chronicle: In which is briefly described how that land in olden time was first discovered, was settled by inhabitants, was appropriated to the larder of the Kings of Norway, received the Christian Faith, was subject to the Archbishops of Trondhiem, and had its own particular Bishops; together with a clear and orderly list of many Kings of Norway and of all the Bishops of Greenland, and other Norwegian and Icelandic events and such of the South Islands | Suderverne or Syderverne (the South Islands) is the ancient Danish and Norwegian name for the Hebrides] | referred to their proper times and years, as much as one may gather from the ancient antiquities and records of Denmark, Norway, England, Scotland, Frisland, Iceland, the Isle of Man,

1726.1 In this work is narrated the ancient history of Greenland to the cessation of communication with it, as well as the voyages undertaken for its rediscovery (amongst them Frobisher's) down to, and including, the three Danish expeditions of 1605-6-7, of which there is a full account.

The last-mentioned circumstance is very fortunate, because no other account of the third expedition—that of 1607—is now known to exist. Purchas, after recounting the events of the second voyage, merely says: "I have also Master Hall's Voyage of the next yeere, 1607, to Groenland from Denmarke, written and with representations of Landsights curiously delineated by Iosias Hubert of Hull; but the Danes (envious, perhaps, that the

and of other neighbouring kingdoms and countries; and furthermore, the three successful expeditions of the most mighty, highborn
Prince and Lord, King Christian the Fourth, King of Denmark,
Norway, the Gothes and Vandals, etc., the two first being made to
the South-Western part of the country in the years 1605 and 1606,
the third directed towards Eriksfiord and the ancient Norwegian
route in 1607. Printed for the honour and remembrance of all
Danes and Norwegians at Copenhagen by Benedict Laurentz, 1608.
The author's name appears only under the preface. This first
edition is so rare that we know of no copy existing in England.
Our references to the work will, therefore, be to the second edition.

¹ This is a reprint with modernized spelling. The title has the additional words: Og nu paa nye trykt udi Hans Kgl. Majestræts privil, Bogtrykkerie, 1726 ("and now printed anew in H. R. M. privileged Printing-house, 1726"). The work is an octavo, affid consists of four preliminary leaves, including title, and 144 pages. Pages 139-144 are occupied by different matter. The account of the expeditions of 1605-1607 occupies pp. 93-139.

² Purchas his Pilgrimes, vol. iii, p. 827.

glory of the Discovery would be attributed to the *English* Pilot), after the Land saluted, mutinied, and, in fine, forced the ship to returne for *Island*. For which cause, I have here omitted the whole."

That Hall should not have written this account himself, as he wrote the others, seems rather strange; but it may very well be that he did not think it worth while, as the voyage really was a failure. In any case, there is no reason that we are aware of, for thinking otherwise than that Josias Hubert wrote it from Hall's notes, and that the "land-sights" (which Hall, as we know, was very capable of drawing) were his work. There is, as far as we are aware, no further indication that Hubert accompanied Hall on any of his voyages.¹

¹ Josias Hubert (otherwise Hubart and Hubbert) was, like Hall, a Hull man. Unless the above may be taken to indicate that he sailed with Hall in 1607, we know nothing of him till the year 1612, when he sailed under Button, probably as mate or pilot of one of the vessels. Some observations of his, made on this voyage and printed by Luke Foxe (North-west Fox, p. 120; see also Miller Christy's Voyages of Foxe and James, p. 171), show that he was both a skilled scientific observer and a very intelligent man. He made a chart of the western coast of Hudson's Bay (see Purchas his Pilgrimes, vol. iii, p. 848; North-west Fox, p. 161; and Voyages of Foxe and James, pp. 163 n., 178 n., and 241) which is now lost. He seems to have been of the opinion that a passage from Hudson's Bay to the Pacific should be sought in Churchill Bay, whence that Bay came to be known as "Hubert's Hope" (see Voyages of Foxe and James, p. 178 note, etc.). He probably sailed with Bylot and Baffin to Hudson's Bay in 1615, and is known to have accompanied them on their remarkable voyage to Baffin's Bay in 1616 (North-west Fox p. 159, and Voyages of Foxe and James p. 231)

Lyschander's Chronica has—as, indeed, is natural-never been translated into any other language; but the main contents of it have become widely known through Isaac de la Peyrère's Relation du Groenlande. This writer accompanied Mons. de la Thuillerie on his embassy from France to Denmark and Sweden in 1644-45, and utilized the opportunity for collecting information on the countries of the extreme North, which he embodied in two treatises, Relation de l'Islande and Relation du Groenlande. The latter was published anonymously at Paris in 1647. About one-half of it consists of an abstract of Lyschander's Chronica, which is alluded to as the "Danish Chronicle", Lyschander's name being scarcely mentioned. It obtained extraordinary currency on the Continent through numerous reprints and translations, and exercised a very considerable influence on the ideas of educated people concerning the far-away countries in question. Unfortunately, however, La Peyrère's accounts are far from reliable. He did not understand the Scandinavian languages, and had to trust largely, not only to translations, but to verbal communications, which he evidently often misunder-Many and serious mistakes thus arose, and regrettable errors concerning the matters treated of in his book obtained, in consequence, wide acceptance. As it is more particularly in connection with Munk's voyage that the different translations of this book have interest, we refer to our bibliographic notice on that voyage for further information on the subject, and content ourselves with mentioning those

which have appeared in this country. The earliest of these was published in 1704 in Churchill's Collection of Voyages and Travels (vol. ii, pp. 447-477). Next followed a very full abstract of those portions of the book which treat of the early history of Greenland proper, and of the voyages undertaken for the rediscovery of it, mainly from Lyschander, which appeared in 1818 in the second English edition of Hans Egede's Description of Greenland. Finally, a complete translation of the Relation du Groenlande was published in 1850 by the Hakluyt Society.

Of Hall's own expedition from England to Greenland in 1612, there are two accounts: one, comprising the whole voyage, by John Gatonbe (or Gatenby), which was not published till 1732³; the other, by William Baffin, which only commences on July 8th, 1612, and was published—in an "abbreviated" form as usual—in *Purchas his Pilgrimes*. The former is the fuller and more complete of the two, and has the advantage of various illustrations and a map, but several details are given only in Baffin's, narrative. The latter, as well as that of Gatonbe down to July 10th, 1612, were reprinted

¹ In Hans Egede's Description of Greenland . . . with an Historical Introduction. Second edition, London, 1818, 8vo, pp. xiv-lxxxvi.

² A Collection of Documents on Spitzbergen and Greenland... Edited by Adam White. (London, 1850, 8vo), pp. 175-249.

⁸ In Churchill's Collection of Voyages and Travels, vol. vi (1732), pp. 241-251.
⁴ Op. cit. (1625), vol. iii, pp. 831-836.

and annotated by Mr. Clements R. Markham in his work on Baffin.¹ We have reprinted them both in full, but we have not reproduced the map which accompanies Gatonbe's account, for reasons which will be found explained hereafter, in our preliminary remarks on the voyage of 1612.

Finally, it should be mentioned that the accounts of all four voyages published by Purchas were abstracted in 1635 by Foxe, in his North-West Foxe.²

II.—Preliminary Remarks on the Voyages to Greenland in 1605, 1606, 1607, and 1612.

The discovery of Greenland by Icelanders in the tenth century and the subsequent fate of the Scandinavian colony planted there have been told so often that there is no occasion for us here to enter at length on that subject. Suffice it, therefore, to remind our readers that Greenland, like Iceland, became, in the thirteenth century, subject to Norway, and, with that Kingdom, subsequently became a part of the dominions of the King of Denmark; but that the communication between Greenland and the Scandinavian countries, after having been kept up for five centuries, entirely ceased in the course of the fifteenth century, owing to various causes.

¹ The Voyages of William Baffin, 1612-1622. London (Hakluyt Society), 1881, pp. 1-37.

² Op. cit., pp. 50-61. See also Miller Christy's Voyages of Foxe and James (Hakluyt Society, 1894), pp. 86-101.

Of these, the principal one was, perhaps, the fact that, the revenue from Greenland being specially allotted to the Royal household, the trade became a monopoly and was neglected when more pressing affairs took up the attention of the King.

The existence of this distant dependency was, however, not forgotten; and, during the sixteenth century, the question of re-opening communication with it was mooted several times, partly on account of the interest felt by well-informed persons in the fate of the Scandinavian colonists there (who had so long been left to their own resources, but who were still supposed to exist), and partly, no doubt, on account of the commercial and financial advantages to be expected, the land being described in many old accounts as fertile and well-to-do. however, was effected till the matter was taken up by King Christian IV. This able and energetic young Sovereign, who took every opportunity of extending the trade and shipping of his subjects, sent out three well-equipped expeditions in the years 1605-6-7 for the purposes of ascertaining the best route in Greenland, of exploring the land, of searching for the old colony, and of re-establishing the dominion of the Danish (or, rather, Norwegian) Crown there.

No copy of the Letter of Instructions given to the commanders of the expedition in 1605 now exists; but in what light the King viewed this undertaking, and what it was intended to effect, may be gathered from the expressions used in the Seapassport, or Letter of Credence, with which the commanders of the vessels were furnished. In this document, which is dated April 18, 1605, we read as follows:—

"We, Christian the Fourth [etc.], . . . Inasmuch as the sailing-route to and from our land of Greenland has become somewhat doubtful and uncertain, because, for a long space of time, it has not been frequented by our people, and inasmuch as we have thought it a part of our duty of government to ascertain the state of that our dominion, in order that we may in future provide for it whatever may be necessary in respect of Religion and the administration of Law and Justice: We have sent our Captain with orders to investigate the route to this our aforesaid dominion of Greenland and the harbours of it, in order that, when those have been found and report has been made to us upon them, We may take such measures as we shall think advisable and required by the circumstances" etc., etc.¹

The expedition consisted of three vessels called Trost, Den Röde Löve (or simply Löven), and Katten. The first of these names is a German word meaning "Consolation", and the vessel was probably so called from some canine favourite of the Queen, who was a German princess. Both Bielke and Lyschander continually refer to the vessel as Hun-

¹ Sjællandske Register [a calendar of letters, etc., issued from the Danish Chancery] for 1605.

den (the Dog), or Skjödehunden (the Lap-dog); and, as might be expected, they indulge in a good deal of punning on the name in connection with those of the two other vessels; for the English equivalents of the names of the two last-mentioned vessels would be the Red Lion (or simply the Lion) and the Cat.¹

The vessels mentioned all belonged to the Danish Navy, and were probably amongst the best of their class, as they are frequently mentioned as being in commission. In a list of vessels employed in 1610 and 1611, Trost and Katten are classed amongst the newer ships, Löven amongst the older ones. The first had been built by David Balfour, a Scotchman (b. at St. Andrews, 1574), who during the greater portion of the period from 1597-1634 was employed in building ships for the Danish Navy. She was a fast vessel, as also was Katten; but Löven is described as rather slow and unhandy when sailing close to the wind. There does not

As we shall often have to mention these and other Danish ships' names, we may observe in this place that, in Danish, the names of ships do not take the article as in English. One would not, in Danish, say, The Sultan, The Victoria, but simply Sultan, Victoria. The article is used only when the name is really an appellative, as in the case of Löven and Katten, and then it forms an integral part of the name, being affixed to the last syllable and inflected with it (unless an adjective is added). As the article, therefore, in such cases, cannot be separated from the substantive and translated by itself, and as it would be surplusage to say THE den Röde Löve, or THE Katten, we cannot, in these cases, use the English article, unless the whole name is translated. We may say the Trost, and we might say the Röde Löve, but we must say Löven and Katten, or else The Lion and The Cat.

appear to be any official record of their sizes, crews, or armaments: but Hall states in his account of the first voyage (see p. 20) that Trost and Löven were of the burthen of 30 or 40 Lasts, while Katten was of 12 Lasts; and, in the note at the end of his account of the second voyage (see p. 80) it is stated that Trost was of 60 tons, Löven of 70 tons, and Katten of 20 tons, which statements agree fairly well, the Danish Last, formerly used for the measurement of ships in Denmark, being nearly equal to two English tons. Hall also states (see p. 80) that, on the second voyage, their respective complements were 48, 48, and 12 men; and on the first voyage it was most likely about the same. According to a list of 1648, on which Trost is still mentioned as an old vessel carrying 16 guns (which, if the figure be correct, must have been of small calibre), Löven appears to have carried only six. Katten was probably only armed with a couple of small pieces. Vessels of her class served only as tenders, and she was, in this case, no doubt chiefly intended for the exploration of bays, harbours, etc. She appears afterwards to have gone by the name of "The Greenland Cat".

John Cunningham, a Scotchman of notable family, was Captain of *Trost* and Chief Commander of the expedition.¹ He is said to have

¹ In Denmark, he was generally called "König", but the name was corrupted in various ways. Lyschander, in one place, calls him "Hans Keymand".

travelled much and far, before he settled in Denmark, where he became a Captain in the Navy in 1603. He left the service in 1619, when he was made Lehnsman of Vardöhuus, that is, Governor of the Province of Finmarken, in the North of Norway. This post he retained until 1651, and he died soon after at an advanced age.

The name of Cunningham's lieutenant¹ (who appears at the same time to have been "skipper", or navigating officer) is stated by Hall to have been Arnold, but nothing further is known of him.

Cunningham's first-mate, who acted as "pilot" of the expedition, was James Hall (in Denmark called "Jacob Hall" or "Hald"), the author of the accounts already often referred to. He was a native of Hull, and may have belonged to a family of that name settled there, and of which several members are known to have been brethren of the Trinity House at Hull in the sixteenth and seventeenth centuries.²

¹ The word "lieutenant" is not used here to denote a particular class of officers so called, which did not exist in the Danish navy previous to 1620. It is used in its general sense of a person empowered to take another man's place in case of need. A seacaptain's "lieutenant" might be another captain, a navigating officer, etc.

We are indebted to Mr. E. S. Wilson, Secretary to the Trinity House at Hull, for the information that, in the course of the sixteenth century, a Hugh Hall (afterwards Sheriff of Hull), a Walter Hall, and two men of the name of John Hall, were members of that Corporation, as well as a Samuel and a Roger Hall in the seventeenth century. The accounts show that, for one of them, a pair of fur-lined breeches, very suitable for an Arctic Expedition, were made in 1610, but his name was John.

Although we have made careful enquiries in Hull and elsewhere, we have failed to obtain a single scrap of information as to Hall's family history, antecedents, and personality—as to which absolutely nothing appears to be known.

That an Englishman should have been thus selected for the post of Pilot of a Danish Arctic Expedition is easily explained when it is taken into consideration that, whilst ancient 'sailingdirections for the voyage from Norway (more especially from Bergen) to Greenland existed in various old writings and were well known (such as those of Ivar Bardsen¹), the generation of Danish or Norwegian mariners who, of their own experience, knew anything about Greenland or its coasts, had long since died out; and, as the most notable recent voyages of discovery (such as those of Frobisher, Davis, and Weymouth) to that region had proceeded from England, it was from thence that a competent pilot was most likely to be had. Nor was Hall the first Englishman who had been employed by a King of Denmark to rediscover the lost Danish Colonies in Greenland. Captain John Allday had commanded an Expedition with that object in 15792; but, on that occasion, as on several others, though the land was sighted, it could not be reached for ice.

¹ See B. F. Decosta's Sailing Directions of Henry Hudson, . . . from the Old Danish of Ivar Bardsen. Albany (N.Y.), 8vo, 1869.

² See Dr. C. Pingel, Nyere Reiser til Grönland, pp. 639-650.

In what manner, or through what channel, Hall came to be engaged is not known. Perhaps a hint in this direction may be afforded by an order, dated May 1606, to the Custom House officers at Elsinore (a copy of which is still extant),1 in which the King commanded them to stop the first English mate, suitable for the King's service, that should arrive there, and to send him to Copenhagen, where the King would cause negotiations to be opened with him. It is not at all impossible that King Christian IV may have obtained the services of Hall the year before in this manner. At the same time, being brother-in-law to James I of England, Christian IV may have been able to hear of a suitable man direct from England. Moreover, one of his most trusted servants was a Scotchman, Andrew Sinclair (b. 1555; d. 1625; from 1607 a Councillor of the Realm), who conducted his-English correspondence, and was frequently sent on business to England, where he was in high favour with James I. His first recorded embassy was in 1610, but he may, nevertheless, have been the intermediary in this affair.

Howbeit, all writers agree that Hall was engaged on account of his real or supposed knowledge of the regions to be visited. Lyschander says² that he had been before "to Frisland and other neighbouring lands towards America", but nothing is known from

¹ Sjæll. Regist, 1606.

² Den Grönlandske Chronica, ed. 1726, p. 96.

other sources about his previous Arctic experiences. Nowhere in his accounts does he refer distinctly to any such, but his language throughout (especially in the Report to the King) is that of a man who has a practical, and not a merely theoretical or hear-say, knowledge of the navigation of Davis Strait. On several occasions, when the Danish officers expressed doubts as to the route he was following, he told them confidently that, if they would follow him, he would conduct the fleet "to a pte of the land without pester of ice"; and, moreover, he gave the mate on board Löven "directions, if he should lose us, to gett [to] that pte of Groineland cleare without ice" (see pp. 6, 7, and 27). Later on (see p. 8), he encountered the great ice-bank, which is well-known to lie in the middle of Davis Strait, "which banke [says Hall] I knewe verie well to lye in the mid-streeme between America and Groineland". Then, having reached the termination of the ice-bank, and "pfectlye knowinge myselfe [says Hall; see p. 9] to be shott in the latitud. of the cleare ptes of the coast of Groineland, I directed my course E. by N. for the lande, the whiche ... we fell withall the next daye."

On the whole, we think that anyone reading Hall's narratives will be inclined to believe that Hall had accompanied some earlier Arctic explorer, though it may have been in a subordinate capacity; and, as he appears to have had particular knowledge of Davis Strait, whilst no earlier voyages to that region in which he can have taken part are known to

have been undertaken, except those of Davis, it seems that, if Hall had been there before, it must have been with him. Of course Hall may not really have known more than what he could gather from the published accounts of Davis's voyages, especially concerning the ice along the coast of Greenland. But, on the other hand, the conclusion that he had been with Davis is not a little strengthened by the only reference to Davis in connection with Hall's knowledge of the geography of Greenland which can be adduced. We allude to John Gatonbe's statement, in his account of the voyage of 1612 (see p. 89), that, on the 14th of May, they had sight of land, "and our master made it Cape Farewel, so called by Captain Davids at the first finding of the country in anno 1585, because he could not come near the land by 6 or 7 leagues for ice." There seems to be about these words a smack of personal knowledge; at the same time, they do not read as if they were intended to convey Gatonbe's own information, but rather appear to be a repetition of what he had heard from Hall on the occasion But, if so, whence had Hall this referred to. knowledge? Certainly not from Davis' accounts of his voyages. The only passage in these which can refer to this matter is the following, in the account of Davis' second voyage (1586)1: "And the 15th June,

¹ Hakluyt's Voyages, vol. iii (1600), p. 103; see also Admiral Markham's Voyages and Works of John Davis (Hakluyt Society, 1880), p. 15.

I discovered land in the latitude of 60 degrees, and in longitude from the meridian of London westwards 47 degrees, meightily pestered with yee and snow, so that there was no hope of landing. The yee lay in some places tenne leagues, in some 20, and in some 50 leagues off the shore, so that we were constrained to beare into 57 degrees to double the same and to recover a free sea, which, through God's favourable mercy, we at length obtayned." There is no description of the country here—no mention even of any promontory; indeed, the name of Cape Farewell does not occur once in Davis' accounts of his voyages. The earliest publication in which it occurs, and through which it has come into general use, is Hessel Gerritsz's map, which was published 1612; but this Hall can scarcely have known, as it was published (according to the explanation on the back of it) sometime after the dispatch of Button's expedition in April 1612, and Hall sailed before Button. Of course Hall may have had the name from the same source (to us unknown) from which Hessel Gerritsz had it; but, whatever this may have been, it is not in the least likely that Hall could thence have obtained (any more than from the map, even had he known it) such a description of Cape Farewell as would enable him, not only to recognize it, but to distinguish it from others. Yet that is precisely what If Hall had known no more of Cape he did. Farewell than what be might have gathered from Gerritsz's map, from Davis' account, or from any

tradition that might have survived from Davis' time, it may be considered almost certain that, when he sighted Cape Christian, he would have taken this for Cape Farewell. But he never did so: he does not appear for one moment to have confounded them; and it seems difficult to see how he can have acquired the necessary knowledge for this if he had not been with Davis when the latter saw and named Cape Farewell in 1586.

That Hall was an experienced navigator may be inferred from a document preserved in the Danish State Archives, amongst papers referring to the voyage of Jens Munk in 1619-20, and which professes to record the opinion of Hall regarding the probability of a North-West passage to China. As we shall have to allude further to this document in another place, it may suffice to say here that it mentions, inter alia, some experiences of Hall's whilst on a voyage to India some years before he sailed in the Danish expeditions to Greenland. The fact of his having been consulted on the above-mentioned subject may, perhaps, be taken as strengthening the supposition of his having been on some previous expedition in search of a North-West passage.

On what terms Hall served on the expedition of 1605 is not known; but it appears that, on his voyage in that year to Denmark (probably after having been provisionally engaged before), he

^{• 1} Indkomne Breve til Cancelliet (Communications received by the Chancery), 1619.

travelled by way of Norway, because there is among the Danish State Papers an Order to the Treasury, dated February 26, 1606, to repay the local authorities at Bergen the sum of 45 Rix dollars, by them advanced to Hall for board and other expenses, "when he had been summoned by Us to this Realm".1

Leaving Hall's subsequent career in Denmark and elsewhere until his death in 1612 for notice in the proper place, we may briefly mention the officers of the other vessels composing the Expedition of 1605.

Den Röde Löve was commanded by Godske Lindenow, a well-known Danish officer, who afterwards became chief of the Dockyard, besides seeing a good deal of active service before his death in 1612.² His lieutenant was Karsten Mannteufel,

¹ Sjællandske Tegnelser (another Calendar of Chancery Letters), xx, fol. 65a.

² Isaac de la Peyrère states (Rel. du Groenl., p. 160) that Lindenow held the supreme command of the Expedition, and this error has been repeated by many writers, such as Forster (Voyages and Discoveries in the North 1786, p. 467) and Barrow (Chronological History of Voyages into the Arctic Regions, 1818, p. 170). Lindenow, as a native and a nobleman, would, as such, according to the custom of the time, no doubt, take precedence over Cunningham, a foreigner; but, as Hall, the Pilot of the Expedition, was English, and very likely knew but little Danish, it was no doubt thought better for Cunningham, a Scotchman, to be placed in command. On the second voyage, however, when Lindenow had gained experience and Hall had probably become familiar with Danish, their respective positions were reversed, and Lindenow held the supreme command.

who had been page to Christian IV, and afterwards became a captain, as was often the case at that time, both in the army and in the navy. He belonged to a still-flourishing German family. In Denmark, his name seems to have been generally translated into Mandieffuel (Man-devil). Lindenow's mate was Peter Kieldsen, of whom Hall implies (see p. 32) that he had served, eight years before, on some other Arctic exploring expedition, and had, on that occasion, shown want of pluck and enterprise. This seems, however, to rest on some mistake. No Arctic expedition in which he could have served is known to have been made about the year 1597; and, although he is known to have served as skipper or navigating officer in 1596 on board a vessel which was sent to the north of Norway, no discreditable conduct is reported of him. Kieldsen may, however, have been out on whaling expeditions. He became afterwards a Captain in the Navy.1

That he was afterwards considered a man of Arctic experience may be inferred from the circumstance that his name appears, together with that of another Styrmand and a certain Biscayan, under a written opinion, dated May 6, 1619 (amongst the papers referring to Munk, Indk. Breve til Canc., 1619), concerning the best route to be taken on some voyage, not further specified. It is to the effect, that it would be best to make for "Terhaffen or Madelin Bay, on the coast of Greenland". From this it may be concluded that the voyage was probably a whaling expedition, undertaken or contemplated by the Greenland Company, which was founded in 1619 at Copenhagen. That Maudlin Bay is described as being situated "on the coast of Greenland", is, of course, accounted for by the fact that Spitzbergen, at that time, was believed to form part of Greenland.

xxxviii danish arctic expeditions, 1605-1620.

The pinnace Katten was commanded by an Englishman, John Knight. With regard to him also, it is stated by some writers that he had been engaged on account of his knowledge of the Arctic Regions; but of his antecedents nothing is known¹. He is not reported to have had any permanent engagement in Denmark; and, whilst Hall remained there until at least 1607, Knight returned to England after the first voyage in 1605, and died in the following year on an English expedition for the discovery of a North-West passage, of which he had obtained the command, very likely on the strength of his having been employed on the Danish expedition of 1605. On board Katten was Alexander Leyell, who wrote the Diary already mentioned (see p. xv). In the first entry, after mentioning the names of the ships, Leyell says: "and Katten carried with her this truthful report". In what capacity he took part in the expedition, is not known. the end of his journal, is a note in another handwriting, signed "Wyllm Hendrichs ij Egebeck", to this effect: "The elevation on the line is not indicated in this Report: whether on purpose or by neglect, I do not know; but the mate ought to

¹ Some seem to have mixed him up with Hall, ascribing to him the position and work of the latter, as, for instance, the author of the Historical Introduction to Egede's *Description of Greenland* (ed. 1818, p. lxv). La Peyrère did probably the same, because he does not mention Knight, but describes Hall (whose name he does not give) as "Captain and Pilot" (p. 150) or as "the English Captain" (p. 155).

have noted it." From this it may, perhaps, be inferred that the writer of the note (who, from another annotation of his, appears to have been a contemporary) thought that Leyell had occupied the post of mate. Nothing further seems to be known of him; but a certain Villom Leyell (perhaps a relative), who was employed in the Danish navy in the early part of the seventeenth century, is stated to have been a native of Elsinore¹.

The expedition sailed on the 2nd of May, taking, not the course recommended by the ancient Scandinavian Sailing Directions, but that which had been followed by English explorers starting from the East. Coast, namely, between the Orkneys and Shetland, past Fair Isle, and thence, as straight as circumstances would allow, for Davis Strait, the entrance of which is but little to the north of Fair Isle. The voyage across the Atlantic was uneventful. Lyschander says that they came within sight of America, and thence steered into Davis Strait2; but, as neither Hall nor Leyell mentions this, the statement is probably founded on some confusion with the second voyage, on which they really went so far West that they sighted America. As he passed near the spot where the imaginary Island of Buss (a few remarks on which will be found in Appendix B.) was then commonly supposed to be, he kept (see p. 24) a

² Den Grönlandske Chronica, 1726 Ed., p. 98.

According to H. D. Lind, Kong Christian den Fjerde og haus Mand pau Bremerholm (Copenhagen, 1889), p. 260.

sharp look-out for it, but, of course, without success. When not far from Greenland, the vessels became separated in a thick fog, and this caused the captain of Löven and his mate to request Hall to furnish them with a chart by which they might proceed on the voyage (or, at any rate, return home) if such an eventuality should again occur. Hall says that he thereupon gave them "a Sea Chart for those coasts", together with necessary directions (see pp. 6 and 27). The Chart thus given was presumably a copy of the one by which Hall himself was sailing, and the interesting question arises: What Chart this can The marine charts of that time are have been? but little known; but it has been suggested that it may have been a copy of the "Stockholm Chart" (see p. xvi), with regard to which we refer our readers to Appendix A.

Some days after this occurrence, Godske Lindenow, with his ship Den Röde Löve, separated himself from the other vessels, and endeavoured to reach his destination by a different course. Hall's account of this matter leaves the impression that, already when Lindenow and Kieldsen asked him for a chart, he suspected that they intended to render themselves independent of him, and that he yielded to their request only after receiving from them the most solemn promises to the effect that they would not do so. When they eventually stood off, he appears to have thought that they did so partly out of fear, being alarmed at the dangers of navigation among the ice and partly out of sheer perversity, feeling themselves

independent with the chart the had obtained. The Danish chronicler, Lyschander, however, puts a somewhat different complexion upon the affair. have already remarked that the course taken by Hall was different from that recommended in the old sailing-directions, of which the tradition had survived. Lyschander alludes to this matter in mentioning Hall's engagement, adding that nobody could tell for a certainty whether the route proposed by Hall really was the better one, but that "the Norwegian" (Baggen) knew for a perfect certainty that it was not the one by which Greenland had formerly been approached, this old route lying further to the north.1 Whether Lyschander, in speaking of "the Norwegian", allowed to the fact that the ancient communication with Greenland was chiefly from Bergen in Norway, or was thinking of Peter Kieldsen (who may have been a Norwegian), is not clear; but, in any case, it appears that a strong difference of opinion had shown itself at the very outset. Hall, following his own ideas, had sailed up Davis Strait to the north, out of sight of land, hoping (with good reason, as it turned out) that he should be able to get round the northern end of the great icebelt, which prevented access to the south-west coast of Greenland; but, whether it be that he had not explained himself sufficiently to the Danes, or that they did not consider his reasoning conclusive, they appear to have feared that, by following Hall's course, they

¹ Den Grönlandske Chronica, 1726 Ed., p. 96.

should only get farther away from the goal of their voyage. It must be remembered that they were not merely to find Greenland, but particularly to find the old settlements, which were at that time universally believed to have been situated near the southernmost point of Greenland, and on the east coast, opposite Iceland; in which case, of course, they could not be reached by the route Hall was following. It was, according to Lyschander, for this reason that Lindenow left the Admiral. At the same time, his expressions seem to disclose a certain amount of national jealousy: "The Dane," he says, "is also able to effect something, when he is obliged to do without the foreigner"; and it is unmistakeable that the Danes were strongly inclined to rely upon Kieldsen, who seems to have been an energetic and self-confident man, rather than upon Hall.

That the matter was afterwards hotly discussed, and that opinions were divided, may be concluded from Bielke's mode of dealing with it. Where he mentions the separation of the ships, he merely says that those on board Löven were tired of always being left behind, their vessel being slower than the others; and, after narrating the exploits and the return of Lindenow, he adds, diplomatically enough, that whoever wishes to know why the ships did not remain together may learn it by asking some one who was present; that it was difficult to write about such matters so as to please all; but that

¹ Op. cit., 1726 Ed., p. 98.

he did not doubt they all had wished to do their duty.

Howbeit, on the 11th of June, in the morning, Lindenow and his companions in Den Röde Löve stood off with a parting gun, steering S.E. before the wind, in order, if possible, to force their way to the coast. As Hall, of course, does not mention the subsequent doings of Lindenow, we may here briefly narrate them, following Bielke and Lyschander. He succeeded soon in coming near the coast, and Mannteufel went off in the ship's boat to explore it, Lindenow awaiting his return at anchor in some comparatively sheltered place. Mannteufel, however, seems to have lost his way, and to have rejoined the ship only after several days' absence, during which he and his men had incurred great danger and hardships. Meanwhile, a gale had supervened, and the Lion had lost her anchor and nearly all the cable. They were opposite an inlet, which they named "King Christian's Harbour",1 but there was so much ice that they could not enter, and they had to sail a considerable distance southwards along the coast without being able to effect a landing. At last they found a good harbour without ice. This they called "Godske Lindenow's Harbour", and there they remained three days, purchasing from the natives

¹ This harbour (which cannot now be identified) must not be confused with the one Hall subsequently (see p. 10) named "King Christian's Fjord".

great quantities of fur and other articles, after which they left for Denmark. Lindenow arrived at Copenhagen on the 28th of July, after a seventeen days' sail, and was received with great enthusiasm. We have no means of identifying the place where he landed. In the short treatise above-mentioned, describing the Greenlanders who were brought home in 1605, it is stated that Trost and Katten came to land 60 Ueger soes to the north of the place where Lindenow landed; and, as these ancient Danish sea-miles are supposed to have been equal to Danish geographical miles, of which 15 make a degree, this would imply that Lindenow landed somewhere between lat. 62° and 63°. Bielke states that Lindenow sailed something like 80 miles southward before he found a harbour, but these statements are too loose to be of any practical value.2

Before his departure from Greenland, Lindenow secured and carried away two of the natives against their wish. It seems as if the Home Authorities had ordered the commanders of the vessels to bring home some of the inhabitants, an order which is easily understood when it is remembered that it was confidently expected that descendants of the old Norwegian settlers would be met with. The commanders appear, however, to have thought that they

¹ See C. Pingel, Grönl. hist. Mindesm, iii, p. 689.

² The Ilua River (in lat. 60° 10') is called Lindenow's Fjord in his honour, but there is no reason for thinking that he ever wasthere.

were, in any case, to bring some of the natives, and did it by stratagem or force, as they could not converse with them. The captured men, when they realized their position, were at first very violent, but had to put up with their fate. Their countrymen, who, to the number of 300, attacked the ship, were easily frightened away by the discharge of a cannon. The captives arrived safely in Denmark.¹

That Hall afterwards was ill-pleased with Lindenow and Kieldsen for thus having succeeded in being the first to return to Copenhagen with the news that Greenland had been reached, and thus, as it were, to skim the cream of the affair, is very natural, and, very likely, accounts for the tone of his narratives with reference to them. However, he and Cunningham executed work of much more permanent value. Whilst Lindenow had contented himself with reaching the country and proving the possibility of re-opening communication with it, they had exerted themselves in carrying out that further part of their orders, which bade them examine the coast and harbours of the country.

After the departure of Lindenow, Cunningham and Hall, with the two remaining vessels (*Trost* and *Katten*), continued their course towards the N.W. Lyschander says² that Hall sighted and sailed along the American coast until he had sight of Jack-

¹ Lyschander, op. cit., pp. 99-107.

² Den Grönlandske Chronica, 1726 Ed., p. 107.

man's Sound, on which he bestowed the name of Fretum Daniæ, whereupon he turned eastwards. As neither Hall nor Leyell mention anything to which this could refer, the statement probably rests on some misunderstanding; but it is of interest in so far that, whereas Lyschander elsewhere appears to share the common mistake that Frobisher's Strait was on the east side of Greenland, the passage referred to implies an appreciation of its true position on the western coast of Davis Strait, provided that he was aware that Jackman's Sound was on the southern coast of Frobisher's Strait.

According to both Hall and Levell, the expedition ultimately reached the coast of Greenland on the 12th of June; and, after having spent a week in examining the bay to which they had come (and which they named King Christian's Ford) and its vicinity, Hall set out in the pinnace on June 20th in order to explore as much of the coast to the northward as he could in the time at his disposal. This exploring excursion, from which he returned on July 7th, after an absence of two weeks and a half, appears to have been very successful, a considerable extent of coast having been examined; but (as we have already had occasion to point out; see, p. vi) Hall does not give any account of this excursion, either in his Report to the King or in the fuller narrative published by Purchas. In his Report, he refers to the maps with which it is illustrated, and we have adduced reasons for believing that copies of those maps originally accom-

panied the fuller narrative. But, even with them, Hall's brevity is very disappointing. It is not only that, without the written account, one loses the historical interest which cannot but be felt in following closely the steps of a notable explorer; but (although the maps, no doubt, express Hall's ideas of the configuration of the coast in general, and of the localities specially explored, faithfully enough, *and better than any lengthened description) it would have been almost impossible to identify many of the places visited, if we had not been able to obtain from other sources some of the information which Hall omits to give. At the same time, it does not seem difficult to explain Hall's comparative brevity with regard to this part of the voyage, even supposing that it is not due to accidental causes, as it well may have been. A primary object of the voyage was to solve the question as to the best route to Greenland; and materials for judging of this could be afforded only by a circumstantial account of the voyage from Denmark to Greenland with special regard to the navigation But, once arrived there, the expedition had a different object before it-viz., to supply the Home Authorities with as accurate information as could be obtained concerning the harbours, roadsteads, convenient landing places, etc.; and this could be conveyed far more clearly and concisely by means of maps than by means of lengthy descriptions. An abstract of the log-book kept on Hall's excursion northwards would have had much interest for us,

but would have been of little use to the Authorities in Denmark, whilst it would have extended the Report to a much greater length. It is not, therefore, very surprising that Hall in this, document, should have been content to refer the King to his maps. At the same time, it must be admitted that these considerations would not apply to the account published by Purchas, which is evidently written for different readers. Here a somewhat detailed account of that excursion would have been in place; but its absence seems to be sufficiently accounted for when it is remembered that most likely this narrative was written later, after Hall's return to England, when he may have been quite able to amplify the Report from memory, but may not have preserved his notes sufficiently complete to be able to write out a detailed description of the excursion in the pinnace. In point of fact, there would be nothing unreasonable in supposing that Hall's notes taken down on that excursion had been lost soon after the event, whereby, of course, he would have been prevented from giving a detailed account of it, either in the Report or afterwards.

There is one item which Hall does not mention, either in that document or in the fuller account of the voyage, and with regard to which a special explanation may seem necessary. It is known from Hall's account of the expedition of 1606, as well as from other sources, that, on the excursion in 1605, some member of the party—whether Hall himself or another is not known—discovered what was believed

to be valuable silver ore. That Hall does not speak of this in his Report to the King is easily understood, though of course he might have mentioned this discovery without giving a description of the other events of the excursion in question, just as he might have given the latter very fully without alluding to the ore. But it was a matter of which the King would be informed by other persons whose daty it was, whilst it lay entirely outside Hall's department, which was the navigation and matters connected therewith. Nor is it surprising that it is not mentioned in the account published by Purchas, inasmuch as the latter has the character of an amplification of the Report; but it is strange that we read nothing about it in the "Topographical Description of Greenland", where it would have found a very natural place. Considering that the account has been abbreviated by Purchas, this may be accidental; but, if it was intentional on the part of Hall, an explanation may be found in the fact that Hall (as appears from Gatonbe's account of the voyage of 1612; see p. 105) continued to believe in the reality of the discovery; for which reason he may, when writing the account of the voyage of 1605, have wished to keep to himself what he regarded as a valuable piece of knowledge. so, he must, however, have changed his mind about it; because, in the account of the voyage of 1606, he does allude to it and even indicates the locality (see p. 66); nor was any secret made of it in Denmark—at least, not for long—because it

is mentioned in Lyschander's *Chronica*, published in 1608.¹

We have already mentioned (see p. xv) that Leyell's Diary, fortunately, in a great measure, fills the gap in Hall's narratives. He accompanied

¹ It seems to me (although Mr. Gosch differs from me) that so remarkable an omission was, without doubt, intentional, it being desired—at first, at any rate—to conceal the position of the silver mine. Probably the discovery of it was communicated privately to the King, who, doubtless, commanded that no account of the branch Expedition should appear in the formal report to himself on the voyage, as a document of that nature could hardly be kept secret. Such a motive would be by no means unusual at the time. In the earliest account of Frobisher's voyages the figures indicating latitude were omitted in order to conceal the situation of the supposed gold mine which he discovered; while there are many other instances in which pains were taken to keep secret the results of an exploring expedition from which great results were expected. Button's voyage in 1612-13 may be cited as an instance (see The Voyages of Foxe and James, p. xxxii). Furthermore, we know (see p. xcvii) that explicit instructions were given to the Commanders of the third Danish Expedition in 1607 that, on their return, they were to give no information whatever to anyone, save the King; and, if we had the formal instructions given for the two earlier voyages, we should no doubt meet with a similar command. The fact that, in Hall's account in Purchas, there is also no reference to the discovery of the supposed silver mine, though, at the time it was published, all conceivable motives for secrecy had long since disappeared, cannot be cited in opposition to the suggestions made above; for we do not know exactly when those accounts were written, or under what circumstances they were "abbreviated". It is very likely that Hall may have sent the account of his first voyage to Hakluyt or Purchas (see p. xi) whilst secrecy was still thought desirable, and that he was, therefore, as silent about the mine as in his Report to the King.-M. C.

Hall on his excursion in the pinnace, and noted down the movements of the party from day to day. His Diary, therefore, forms a very valuable commentary to Hall's maps, which we may, accordingly, most suitably consider further in this place.

Hall's maps are four in number and are accompanied by explanations of the letters of reference inserted on them. The three first represent particular localities,*and are drawn on a large scale: the fourth is a general map of the whole coast explored. On each of them, a compass is inserted, but only the general map is drawn true to this. others, the two first show a westerly, the third an easterly, deviation of the North point. Degrees of latitude and longitude are not indicated on the maps; but, in the explanation of the General Map, the latitudes of the places mentioned are given. The figures, however, do not always agree with those given in Hall's narratives. Hall states in the text printed by Purchas that he explored the coast from lat. 66° 30' to lat. 69°; but the General Map only extends from Queen Ann's Cape (IV, a), which in the explanation he places in 66°, to Christen Friis' Cape (IV, 1), which he places in lat. 68° 35'; nor is any other place mentioned in the text to which a higher latitude could be ascribed. As regards the southern limit, no place is mentioned as visited by Hall that is really farther south than Trost Sound, which extends from lat. 66° 27' to 66° 29'. The coast south of this, as far as lat. 66°, Hall no doubt saw from a distance; but, as regards the coast between lat.

68° 35' and lat. 69°, this is not possible, because, beyond the first-named point, the coast-line turns easterly into the Bay of Disco, and could not be seen by Hall unless he had entered the bay, of which there is no evidence, although he may have been far enough to be aware of its existence.

In endeavouring to identify the places visited and named by Hall (for which purpose we refer to the large track-chart accompanying this volume), we may commence our survey with the locality from which he set out on his special exploring expedition, and which is also the first locality mentioned of which there is a special map (Map I), viz., the inlet which he calls King Christian's Ford, or simply King's Ford—the last word, of course, representing the Danish Fjord. For the identification of this, we find in Hall's account two data—viz., the latitude of 66° 30' for the entrance of the fjord, and 66° 25' for their anchorage therein (see p. 37), and his statement that, on the northern shore, not far from the entrance, a mountain, shaped like a sugar-loaf, and to which he gave the name of "Cunningham's Mount", forms a conspicuous landmark (see p. 10). As long as Hall's maps had not been brought to light, and it was not known what reliance could be placed on his observations of latitude, it was tempting to identify his Mount Cunningham with a mountain of similar appearance on the Amerdlok Fjord, near Holsteinborg, well known to all colonists and navigators; and this has, therefore, generally been done, although Kjærlingehætten, the mountain in question, stands some 25' farther north than the latitude given by Hall for King Christian's Fjord. Some have, accordingly, identified the latter with Amerdlok Fjord: others, while holding Kjærlingehætten to be Mount Cunningham, have considered the Ikertok Fjord to be King Christian's Fjord—in both cases attributing to Hall a degree of inexactitude for which there was no occasion. With Hall's maps before us, the matter stands differently. As soon as these became known in Denmark, those who were best acquainted with the localities in question at once recognized the identity of Hall's King Christian's Fjord with the Itivdlek Fjord, which is situated within a couple of minutes of the latitude indicated by him, and in which all the notable features marked by him may readily be traced. Capt. J. A. Jensen, who has mapped the whole of this coast, and had suspected the truth before seeing Hall's map, discusses this question at length in his paper on the results of his explorations. Referring to Kjærlingehætten, on the Amerellok, which had hitherto been identified with Mount Cunningham, he says1:---

"At the entrance of the Fjord of Amerdlok there is certainly a very conspicuous mountain, Kjærlingehætten (2,470 feet), but the same is the case at Itivdlek. Near the entrance, on the northern shore, a very characteristic mountain, Kakatsiak,

¹ Meddelelser om Grönland, vol. viii (1889), pp. 44-45.

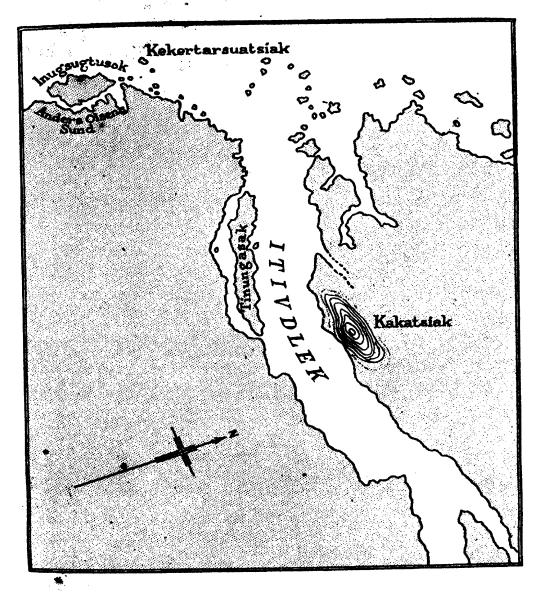
which at once attracts attention, rises to a height of 3,250 ft."1

Further on, he says2:—"In comparing the map [i.e., Hall's] of King Christian's Fjord with the map which I have executed of the Fjord of Itivdlek, important points of similarity will at once be noticed. Among them, I would particularly , draw attention to the shape of the fjord, which terminates inland with a slight turn towards the south; to the large bay, directed towards the N.E., on the north side; to the small bays, marked b and c, on the south side; to the decided advance of the coast, with a large bay on the west side, opposite Mount Cunningham; to the very peculiar, long, narrow island on the south side, separated from the mainland by a narrow sound; and, finally, to the small island—'Trost Island'—near the entrance of the fjord." Several other points might be adduced if necessary, one of which may be mentioned. Hall states that the entrance of the fjord is in lat. 66° 30', but that their first anchorage inside was in lat. 66° 25'; and, although these figures are slightly too low, and the difference too great, yet they imply an important peculiarity of the fjord: viz., that the westernmost portion of the southern shore trends somewhat to the S.E., which is a very rare feature

¹ He adds, in a note, that mountains in Greenland bearing this name, even if not particularly high, always are very conspicuous, on account of their being isolated; for which reason he found them very useful for the triangulation.

² L. c., p. 45.

in Greenland fjords south of Disko, nearly all of them having a decided main direction towards the N.E. In illustration of this, we subjoin an outline



of Itivdlek, traced from an unpublished map by Capt. J. A. Jensen, made during his survey for the Danish Government, and drawn to about the same

scale as Half's map. In order to facilitate comparison, this outline is drawn (as, also, are those of the two following maps), as nearly as may be, in the same position as Hall's map of Itivdlek (Map I), for comparison with which it is mainly intended. The latter is not drawn north and south, though it pretends to be so. The true north is indicated on the outline-map annexed.¹

Mr. Steenstrup, who has been in Greenland, in his paper already quoted, entirely endorses? Capt. Jensen's view that the "King Christian's Fjord" of Hall is the Itivdlek Fjord, and there can be no doubt of its being correct. An important starting-point is, therefore, gained for the identification of the other places mentioned by Hall. The various localities within the Fjord which are marked with letters on Hall's special map of King Christian's Fjord (I) will be referred to in connection with Hall's account of his visit to each of them respectively.

It was on the 20th of June, in the evening, that

It should be observed that only the western half of Itivdlek Fjord is represented within the border-lines of Hall's map (I). The inner portion, which has a more decided S.E. direction, was never explored by Hall himself; but, on his return from his excursion to the North, he learnt from the officers of the *Trost*, who had examined it in his absence (see p. 46), that it was not, as they had first thought, a great river, but a closed bay; and this fact he has apparently indicated by a slight addition to his drawing, outside the border-line of the map, which only encloses the portion examined by himself.

² In Meddelelser om Grönland, vol. ix (1889), p. 46.

Hall set sail from King Christian's Fjord (Itivdlek) on his excursion northwards in the pinnace Katten, steering north (see p. 42). Leyell's entry for the 21st is as follows: "21. The wind East; their course N. by E., and they came into a harbour which they called Captain Könningem's Harbour." This is, of course, what Hall calls Cunningham's Ford (see Map II and pp. 66 and 80); and, on the first night, they no doubt remained in the place on the south side, not far from the entrance, which on the special map is marked a, and described as "The first place of ancoring in this ford."

Leyell continues: "22. The wind S.W.; their course S.E. They came into a harbour which they called Kattvigh, where they remained until the 24th of June." The course indicated shows that they had been sailing up Cunningham's Fjord, in confirmation of which we find, marked δ on Hall's map, a place higher up, which he describes as "Catt Sound or Weike." The name, Catt Sound, may be derived from the name of the pinnace, but

¹ The last term is, doubtless, the Danish word *Vig*, meaning a creek or small inlet, which Hall has adopted. It is very commonly used in combinations, and is the same which occurs so frequently in the form of "wich", in the names of Danish settlements in England. That Hall uses the alternative of "sound" seems to imply that he was not quite sure whether it was a sound or merely a bay.

We may take this opportunity of alluding to another name which may have been derived from this vessel, though not mentioned in any of our accounts of this voyage, viz., "The Catt's Chance", which occurs on Hessel Gerritz's map. True, he'places

may, perhaps; have an origin similar to that of another name afterwards mentioned by Leyell, namely, Pustervig, in connection with which we shall refer to it again. The small creek marked c, and named "Green Sound or Weike", is not mentioned in any of the texts. It was near the anchorage marked d on Hall's map, and named "Mussel Sound", that he stopped on the return journey, and discovered what he thought to be silver ore (see p. xlix), for the sake of which he again visited the place in 1606, and which also was a main object of the Expedition of 1612. Hall's account of this second visit, in 1606, enables us to identify his Cunningham's Fjord. He says (see p. 67) that, on the morning of August 3rd, they rowed five or six leagues up the fjord, and, "seeing it to bee but a Bay"-an expression which implies that they at first supposed it to be the lower reach of a river—they returned to the islands at the mouth of the fjord, which are described as being very numerous, and after supper they rowed some three leagues up another fjord, where they passed the night. In the morning, they set out early to return to their ship, but had difficulty in reaching her, on account of a strong southerly wind. From this it follows that

it in 62° 30'—that is, in a locality which Hall never visited; but it would not be surprising if he had made a mistake in that respect. It is clear from other evidence that Gerritz had information from persons who knew about the voyage of 1605; and the name is so peculiar that this is the source from which he most reasonably can be supposed to have obtained it.

Cunningham's Fjord was a river-like inlet, sufficiently long to allow of their rowing up it more than fifteen miles, but not longer than that, by so doing, they could ascertain it "to be but a bay"; moreover, that close by, to the north of it, there was another similar inlet more than nine miles long; finally, that the sea outside was studded with islands. In addition to this, Hall gives the latitude as 67° 25', from which we may conclude at least this much: that it was not far north of the present Holsteinborg; and, as, on this portion of the coast, there are only two fjords answering the above description of Cunningham's Fjord and its northern neighbour-viz., the two Kangerdluarsuks,1 just to the N. of Holsteinborgwe have no hesitation in identifying the more southerly of these with Cunningham's Fiord. In this respect, we may further point out that, according to Leyell, they steered S.E. in sailing from their first anchorage near the southern shore to Catt Sound on the northern shore; and, even making due allowance for the variation of the needle (which Leyell may not have taken into consideration), it is evident that this statement necessarily implies that the main direction of the fjord—or that part of it—was decidedly S. of E. This, as we have already observed, is a very rare feature in the fjords in this part of Greenland; but it is unmistakeable in the western portion of the

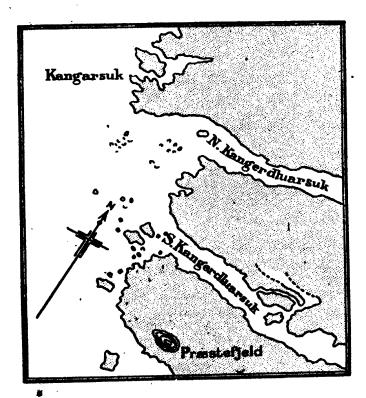
¹ This word really means "fjord", and it occurs in numerous combinations; but many fjords in Greenland have no more particular name.

Southern Kangerdluarsuk. The inner half of the fjord turns northerly, but Hall has not drawn more than the lower part up to this bend, which, however, is plainly indicated in his map (II). Catt Sound and Green Sound may, with great probability, be identified with two of the sounds between the islands which here narrow the fjord very considerably, and almost fill a semi-circular bay on the northern shore; from this bay, too, a creek turns off in a northerly direction, which very likely may have rendered Hall doubtful whether he ought to describe these places as "sounds" or "weikes". These details will be easily recognized on the subjoined outline of the two Kangerdluarsuks, traced from the same map of Capt. Jensen's from which that of Itivdlek was borrowed. It will be observed that, in this case, Hall's scale is considerably larger than in his map of King Christian's Fjord. The similarity which will be observed on comparing Hall's map with the above is, perhaps, not quite so striking as in the case of Itivdlek, but we think it unmistakeable. rate, nothing can be pointed out in the way of difference that could invalidate the conclusion, to which we have come by the considerations above detailed. It was, then, in the Northern Kangerdluarsuk that Hall's party passed the night of the 3rd of August 1606, after having rowed there amongst the islands; and a glance at the map shows at once that, in the face of a strong southerly wind, they may very likely have had much trouble in regaining their ship, which was anchored south of the entrance of the

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Southern Kangerdluarsuk, particularly when they lost for a time the protection of the numerous islands.

Our identification of Cunningham's Fjord with the Southern Kangerdluarsuk agrees perfectly with the various statements in the texts with regard to the position of this fjord in relation to others; but it



will be more convenient to postpone the demonstration of this, and to resume for the present the further consideration of Hall's excursion in the pinnace.

After remaining in Cunningham's Fjord two days—no doubt employed in exploring the inlet and preparing his map of it—Hall continued his excursion towards the North. Leyell's next entry is as follows: "[June] 24. The wind W.S.W.;

their course S.E. to E. They came into a large fjord which they called Pustervich, and remained there still for two days." This name does not occur in Hall's list of fjords, harbours, etc., but there can scarcely be any doubt of its signifying the same place, which is marked on Hall's General Map under the name of "Prince Christianus ford" (IV g). It is as little probable that Hall would have omitted a large fjord where he spent two days, as it is that Leyell would have omitted a fjord of so great importance as this one must have been, to judge from Hall's map. The latitude given by Hall (viz., 67° 30') corresponds nearly to that of Nagsugtok; but we believe that another large fjord, Isortok, is really meant, although the entrance to the latter is in lat. 67° 10'. Hall's General Map is not, of course, to be taken as intended to give an accurate delineation of the different capes, bays, and fjords, but rather as indicating their relative positions. At the same time, a glance at King Christian's Fjord and Cunningham's Fjord, as thereon represented, shows that the outlines are not by any means fanciful or carelessly drawn, but are meant to convey a notion of some of the principal features, such as the peculiar small island to the right of the entrance of Itivdlek and the small islands narrowing the passage in the Southern Kangerdluarsuk. Bearing this in mind, we would point out that Prince Christian's Fjord is drawn on the map with a branch on the right side from the entrance, having a decided southerly direction, which

may very well represent the similar branch of the Isortok, called Isortuarsuk, whilst no such feature is found in Nagsugtok. The main continuation of the fjord is not represented on Hall's map, though its existence is indicated by the absence of an outline closing the bay; from which circumstance, we may fairly infer that it was in this southern branch that they stayed. This would also explain Leyell's otherwise unintelligible statement that their course was S.E. by E.; because, although this cannot apply to the day's sail as a whole (the coast trending, as it does, from south to north), it would correctly apply to the last portion of their sail that day, if this brought them to an anchorage in Isortuarsuk. Moreover, there is another instance (see p. lxxvi) where Leyell's statement of the course sailed unquestionably applies only to the end of the journey. In favour of identifying Prince Christian's Fjord with Isortok, we might adduce the fact that, according to Hall's statements, the difference of latitude between Prince Christian's Fjord and Cunningham's Fjord, was only 5'; but, as the figure given by Hall for the latter place is erroneous, if our interpretation be right, we cannot attribute any great weight to that point. As against our interpretation may be mentioned that Prince Christian's Fjord, on Hall's map, is represented as having a decided south-easterly direction for * some distance from the entrance, whilst both Isortok and Nagsugtok, in their lower portions, run very decidedly N. to S.W.; but, as Leyell expressly describes Pustervich as a large fjord, and as Hall

has drawn Prince Christian's Fjord as such, it seems that the choice must, nevertheless, remain between those two—the only large fjords on this part of the coast—and that, the circumstance in question must be attributed to some incompleteness of the notes, etc., by means of which Hall drew his map—a defect which would also explain why no special map of it was given.

Finally, the names require a few moment's attention. Hall would naturally wish to choose for the newly-discovered localities names of Danish origin or form. Lyschander expressly states that certain; places in Greenland were named after localities in Denmark to which they bore some resemblance, though his grandiloquent words ill accord with the few instances of such naming which we find in our accounts of the voyage. It would seem that Hall, on this expedition, being himself insufficiently acquainted with Danish, left the suggestion of names to some Dane on board, whose taste in this respect was not of the best. Pustervich, the name given by Leyell for this fjord, is the same (only spelled in the old-fashioned way) as Pustervig, a name still borne by a street in Copenhagen, which occupies the site of an ancient creek or watercourse, formerly outside the town; and, if some native of Copenhagen amongst the crew was allowed to propose a name on that occasion, that of Pustervig may very well thus have been suggested for the

Greenland fjord. One is the more inclined to think of this origin because the name "Catt Sound", in Cunningham's Fjord, recalls that of another street at Copenhagen (Kattesundet), so called from an ancient branch of the harbour now filled up; whilst a third name among those mentioned by Leyell equally reminds one, as we shall see, of another locality in the Danish capital. In any case, nothing would be more natural for Hall, when, after his return, he worked up his Report, and had become acquainted with the original Pustervig, than to change this vulgar appellation for the far more genteel one of Prince Christian's Fjord, in honour of the infant Crown Prince.

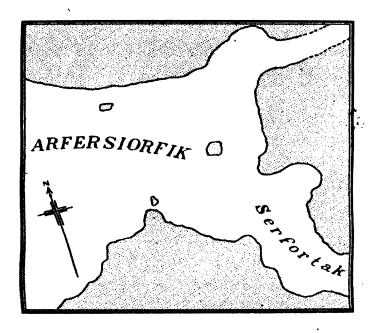
After remaining in Prince Christian's Fjord (Isortok) over the 25th of June, they continued their voyage northwards, and arrived on the following day at another fjord, which, Leyell says, was called "Romsöefjord". This name is not mentioned by Hall; but, as the next halting-place mentioned by Leyell, where they stopped on the return journey, is marked on Hall's General Map as the most northerly but one of the localities visited (not counting Christen Friis's Cape), Romsöefjord must be identical with the northernmost of the fjords indicated on Hall's map, which, in the explanation of the General Map (IV, &), is called "Brade Ranson's

¹ Prince Christian of Denmark, son of King Christian IV, had been born two years farlier, namely, in 1603. He never came to the throne, dying in 1647 before his father.

Ford". Hall states that this fjord was in lat 68% near which parallel there are two large fjords the Atanek and the Arfersiorfik; and, but for Hall's special map(III), it would be difficult to say with much probability which of them is meant, in spite of the difference which they really exhibit. The Atanek the more southerly of the two-opens direct on the sea with a wide mouth, and is continued a considerable distance inland, gradually diminishing in width, without exhibiting anything remarkable in its configuration. Arfersiorfik, the more northerly of the two inlets, consists of an outer portion of very irregular shape, bounded on the northern side mostly by islands, and an inner portion, of the usual Greenland type, which is entered through a narrow sound of very peculiar shape, called Serfortak, and this, we think, is easily recognised in Hall's map of Brade Ranson's Fjord (III). The latter is evidently intended to represent only a fragment of the fjord, but the sharp headland pointing northwards, the narrow sound winding round towards the S.E., and exhibiting a deep round bay pointing N.E., are, as it seems to us, readily identified on a map representing Serfortak on a sufficiently large scale such as the subjoined outline copy of a sketch drawn on the spot by Capt. Hammer, who accompanied Capt. Jensen in his exploration of this coast in 1879. It

¹ On this sketch, we have put in the north point only approximately.

is true that, on Hall's special map, the bay on the west side of the headland is drawn too deep before taking a westerly turn, and that the northern shore of the fjord is continued westwards directly from the round bay (whilst in reality it trends away in a northerly direction for some distance); but this does not seem sufficient to outweigh the strong points of



agreement; and so much the less as, on the General Map, where these features are clearly indicated, the coast in question is drawn in this respect exactly as it really is. On the General Map, the part represented in the special map is drawn disproportionately large, and the outer channel is much shortened; but this need not surprise us if we remember that Hall spent only one evening and one morning in the locality. From Isortok to Serfortak is a sail of some ninety miles; but, as the wind

was W.S.W., it was favourable all the way; and, as the shortness of the midsummer night in those latitudes would permit an early start, this is by no means more than what they may have accomplished in one day. The coast from Isortok northwards is flat and uninteresting, and would not tempt them to stop on the way out, whatever they might do on the return journey if they had plenty of time.

As regards the name: we may observe that it may very well be that the place was originally called Romsöefjord, as Leyell has it, and that Hall afterwards changed it; in which case, it would be derived from Romsö, a local name which occurs at least twice in Norway; but Romsö may also be a mistake for Ranson. This, in its turn, is very likely Rane is a Scandinavian name, and a corruption. there may have been a Brade Ranson on board; but the probability is that Ranson is meant for Rantzau, and that it was intended to name the fjord in honour of Breide Rantzau, a distinguished member of the Council of the Realm, like Henrik Ramels and Christen Friis, after whom other localities were named. Bielke says expressly that several localities were named after Councillors.

On his special map of Brade Ranson's Fjord (III), Hall marks and names three places:—a, Shoulde Vik; b, Henrik's Pass; and c, Cliffe Road. The last of these names clearly means a roadstead near

¹ Breide Ranszau, of Rantzausholm, was born in 1566 and dred in 1618.

a cliff; of Shoulde Vik (which seems to be meant for a Danish name), we can offer no explanation; but the meaning of "Henrik's Pass" may be gathered from Leyell's entry for the 26th, which is to this effect: __"26. The wind the same, with some fog. They came into a fjord, which they called Romsöefjord. There they put on shore a disobedient son, by name Hendrich Hermansen, for the chance of his keeping himself alive as a pedlar." In the margin is added, in the same handwriting as the note at the end of the journal, alluded to above (see pp. xvii n., and xxxviii):—"His father lives at Elsenore and is called Herman Roos." doubt "Henrik's Pass" indicates the spot where this unfortunate man-probably under sentence of death -was given this miserable chance of life. ordering him and another convict (see p. 49) to be left in Greenland, the Danish Authorities (who, of course, were quite ignorant of the state of things there) were no doubt influenced by the idea that descendants of the old Scandinavian settlers were still to be found, and imagined that the two outcasts would have a better prospect than they really had. Very likely, too, it was thought that, in the future, they might prove useful intermediaries.1

The place where, according to Leyell, Hall's party

¹ It will be remembered that Frobisher, in 1577, was similarly taking out some "condemned men", but that he put them on shore at Harwich in consequence of instructions received from the Queen.

stopped at the end of the following day (June 27th) is marked as Bauhouse Sound on Hall's General Map (IV, j), and as it is to the south of Brade Ranson's Fjord, it follows that it was on that day that they turned back, after having been as far as Christen Friis's Cape. In his report to the King of Denmark, Hall implies (see p. 14) that this Cape was in 69°; but, in the explanation to the General Map (IV, 1), the latitude is stated to be 68° 35.' That the latter figure is the more correct, is evident from the consideration that, in order to reach a point on the coast of Greenland in lat. 69°, Hall would have had to travel a very considerable distance round the Bay of Disko; but no such thing is indicated in Hall's accounts or on his map; nor could he possibly have reached so far and returned to lat. 67° 56' in the course of one day. The Cape is clearly marked on the General Map as pointing to the W., on the same line of coast as the places until then visited. In lat. 68° 35' there is no particularly noticeable promontory or cape; but, from about that point, the coast begins to trend eastwards, into the Bay of Disko, and this circumstance may well have been the cause both of Hall singling it out amongst other capes and of his having turned back at this point. According to Hall's account, he turned back in deference to the wishes of his companions, who feared to proceed further (see p. 46), and the circumstance which we have mentioned affords a plausible explanation of his so doing. Supposing that they did advance far enough to see the vast bay open out towards the east, this sight may

very likely have called forth Hall's eagerness as an explorer so forcibly as to render his companions strongly sensible of the danger in venturing too far. The situation in which Hall found himself must, in that case, have been very like that of Hudson. Fortunately Hall was wise enough not to insist, but to content himself with looking, as it were, round the corner and, perhaps, across to the big Island of Disco, and thus, in a measure, extending his examination of the coast as far as lat. 69°, which, as we have seen, he claimed to have done. Indeed we do not see how he could have expressed himself to that effect, unless he had advanced far enough to observe the entrance of the Bay of Disco. Our view that he did so appears to be not a little confirmed by the fact that on the Stockholm map, the turn of the coastline into the Bay of Disco is indicated, though it is not continued far, and the name of the cape is placed so as to refer rather to a point looking N., just inside the bay. From this we may, at any rate, conclude that the information of the person who inserted Hall's names on this map was of a nature to suggest that Hall had rounded the southern shoulder of the bay. In fact, we believe that we may claim for Hall the discovery, or rather the rediscovery, of the Bay of Disco. This was doubtless known to the ancient Scandinavians, and perhaps even to later navigators whose observations were not published; but Davis, the only more modern explorer who is known to have passed the locality (in 1586), does not mention it,

nor is it marked on the New Map (1600). That nothing is indicated referring to this either in Hall's account or in Leyell's journal need not surprise us, as Hall says but very little on the events of his expedition in the pinnace, and as Leyell's entries are extremely laconic.

We have no further means of identifying Christen Friis's Cape, but the latitude (68° 35') agrees very closely with the western extremity of the island of Sarkardlek, the identification of which with that cape entirely falls in with the above considerations.

Levell does not mention their having proceeded as far as Christen Friis's Cape, on June 27th and then returned, as we have seen that they inder have done, but simply says; 27 hay came into a harbour and called it Baahus hafn. On Hall's map (IV, j) it is called "Bayhovse sound". The name is probably borrowed from Bohus-lehn, a district on the shore of the Kattegat, north of Gothenburg which at that time belonged to Denmark. As the population is mostly seafaring, there may very likely have been a Bohus man on board the pinnace. On Hall's maps, the letter j, which indicates this place, is inserted close to the coast-line, which is here drawn quite straight, from which it may be inferred that Bauhouse Sound was a sound between an island and the mainland, or between two islands near the coast. The latitude given by Hall is 67° 56′, but there are so many islands in this neighbourhood (such as Nunarsuak, Rifkol, Agto, etc.) that to fix upon any of them would be mere guess-work.

Leyell continues his journal thus:-"28. The wind S.S.W. They came into a harbour, which they called Arenntsund, and remained there until the ard of July; and, on the 2nd of July, five Greenlanders came to them, each of whom the steersman presented with a fish-hook, in order that they might come to us again; but they and many others all rowed northwards, and none of them returned." Here, again, we meet with a name which does not occur on Hall's map; but there can be no doubt that it applies to the same place mentioned on Hall's map (IV, h) under the name of "Arnold's Sound", because, as they remained there several days, the place cannot be otherwise than be mentioned by both Half and Level Arnold's Sound - probably so called after the slapper, or pavigating officer, of the Trost, whose full name, for aught we know, may have been Arnold Arents-is marked on Hall's map in the same manner as Bauhouse Sound, and would therefore presumably be a similar locality. The latitude being, according to Hall's list, 67° 45', it may, with very great probability, be identified with the sound between the mainland and the island of Kangek, which extends from 67° 38' to 67° 48'. According to Leyell, they remained there four clear days, but he does not say why such a prolonged stay was made. however, he states that the wind was S.S.W., it would, of course, be unfavourable to their progress southward.

Leyell's next entry is the following: "[July] 4. A light northerly wind in the forenoon; in the after-

noon, a gale from the S.W., with rain. They came into a harbour which they called Mussel Harbour and stayed there two days. There they found in a mountain precious ore, which they carried home with them." This is, of course, the "Mussle Sounde", already alluded to (see p. lviii) as being marked on Hall's special map of Cunningham's Fjord (II, d) and situated just south of the entrance of the latter. All accounts agree that it was here that the supposed silver ore was found.

Leyell continues: "6. The wind as before; their course N.N.W.; and they came into a large fjord, which they called Rommel's Fjord, and on the same day into another fjord, which they called Skaubofjord, and there they set up three beacons." Ramel's Fjord (as it is correctly spelled in the account printed by Purchas, whilst on Hall's list it is called "Henrik Romle's ford") was no doubt so called after Henrik Ramel, a wealthy and influential Danish nobleman, who was member of the Council of the Realm, and much interested in trade and shipping. Skaubofjord may have been called so from some Skaubo, that is, native of Skagen (the Scau), on board. At the same time, as two other localities have had names given to them identical with those of places in Copenhagen (see p. lxv), we may fitly mention that there is at Copenhagen a Skoubo Street, which forms a corner with Kattesundet, and the name of which is often pronounced very nearly as Skaubo. In Hall's explanation of his General Map, he places Ramel's Fjord (IV, c) in lat. 66° 35', from which it

follows that the two names Ramelsfjord and Skaubofjord must refer to two of the three broad inlets between Holsteinborg and Itivdlek. The latitude given for Ramel's Fjord would, of course, suit the southernmost best; but, as Skaubo Fjord must be understood to be south of Ramel's Fjord, the latter name cannot mean any place south of Ikertok, the second of these inlets; and, as a matter of fact, Ikertok itself has, though on different grounds, been considered to be Ramel's Fjord. But Hall's account of his return from Cunningham's Fjord on the second voyage (see p. 68) does not agree with this identification. He says that, having brought Ramel's Fjord E. by N. of them, they towed on with their boats until they came to and entered a bay, which consequently must have been to the south of Ramel's Fjord. This bay, which he calls Foss Bay, he describes as a river—that is, as comparatively narrow and long. As regards this latter point, we may note that, on the first night, they proceeded a considerable distance up the fjord-farther than Hall thought advisable. In the course of the night, one of the vessels drifted several miles further up, followed on the next day by the other vessel, and, from this anchorage, they rowed up as much as 10 leagues, or 30 English miles. The fjord in question must consequently be one which penetrates far into the mainland; and the description, therefore, seems applicable to no other fjord, between Holsteinborg and Itivdlek, than Ikertok. If, then, Foss Bay be Ikertok, Ramel's Fjord, which is north of Foss

Bay, must be Amerdlok. Hall's map is of no use for determining this question, because Foss Bay was not visited on the first voyage, and is therefore not put down on his map, which only shows one inlet between Cunningham's Fjord and Itivdlek. Our identification of Ramel's Fjord with Amerdlok of course implies that the latitude (66° 35') ascribed to the former in Hall's explanation of the General Map is too low¹; but, as we already have noted several instances in which his latitudes are undoubtedly erroneous, and in what follows shall have to point out others, each of them must be dealt with on its own merits, and the circumstance cannot be held to outweigh the considerations adduced.

It remains to identify Leyell's "Skaubofjord", in reference to which we may recall his statement (see p. lxxiv) that the course was N.N.W. when they arrived at Ramel's Fjord, a statement which (as in another case already mentioned; see p lxiii), can be understood only of their final course. The only other fjord into which they can have arrived, under these circumstances, is Ikertok, viz., through the narrow sound connecting it with Amerdlok. Leyell's Skaubofjord must, therefore, be identical with Hall's Foss Bay; and, in this case, as in that of Pustervig, Hall must be supposed afterwards to have changed the name originally given.

We stated above (see p. lxi) that our identi-

¹ Baffin, in his account of the voyage of 1612 (see p. 126), gives 67°, which is as much too northerly as Hall's figure is too southerly.

fication of Cunningham's Fjord with the southernmost of the two Kangerdluarsuks, just north of Holsteinborg, would be found to agree very well with what might be gathered from the various accounts as to the position of Cunningham's Fjord relatively to other localities; and, as these indications refer primarily to Ramel's Fjord (Amerdlok), they may be suitably mentioned here. In his account of the voyage of 1606, Hall says (see p. 65) that in the morning he had sight of the coast and found himself thwart of Ramel's Fjord, when he decided to proceed to Cunningham's Fjord, where he arrived in the afternoon. On the 6th of August, they left the latter and came to an anchor the same night in Foss Bay, south of Ramel's Fjord, but we learn from Bruun's Journal that they did not leave Cunningham's Fjord till towards evening. Baffin states, in his account of the voyage in 1612 (see p. 125), that, on the day when Hall died, they buried him and afterwards set out rowing in the shallop for Cunningham's Fjord, where they arrived in the morning, after having passed the night on some island. They set out on their return journey in the evening, and arrived early next morning at their ships, which were at anchor on the south side of Ramel's Fjord. He states that the distance was about 12 leagues, which would place the entrance to Cunningham's Fjord, where the supposed mine was, about 15 miles N. of Holsteinborg. All of this is in keeping with our view that Cunningham's Fjord is the Southern Kangerdluarsuk.

There remain for identification the two "capes", Queen Anne's Cape and Queen Sophia's Cape. These are shown not only on Hall's General Map (IV, a and IV, d), but also in the sketch of the coast which is inserted in Hall's Report to the King of Denmark (see p. 9), and which is well worthy of attention, especially in this connexion. We see Mount Cunningham (Kakatsiak) in the middle, the point of view being just opposite the entrance of Itivdlek, so as to exhibit the mountain to its base; on both sides of this, the coast is seen stretching away north and south, the mountains diminishing in the perspective, apparently ending in a low point towards the north as well as towards the south. Captain Jensen says¹ that, from whatever position out at sea this coast is viewed, the mountain of Kangarsuk (1,730 ft.) to the north, and the island of Simiutak (930 ft.) to the south, present themselves as limiting the visible line of coast, and therefore appear as promontories. From this, it is a fair conclusion that these are the two points indicated to the extreme left and right of Hall's sketch. But we think it is a mistake when, on the strength of this, Queen Sophia's Cape has been identified with * Kangarsuk, and Queen Anne's Cape with Simiutak. There is no necessity to refer these two names, as inserted over the sketch, to the two extreme points, and Hall's references to them in his text (which have not hitherto been taken into considera-

¹ Meddelelser om Grönland, vol. viii (1888), p. 46.

tion for the solution of this question) prove, we believe, that they refer to points inside the two extremities. On Hall's map, Queen Sophia's Cape is placed between Cunningham's Fjord and Ramel's Fjord, which is in keeping with all the statements concerning it in the different accounts. Neither in his own account of the first voyage, nor in that of Leyell, is the passing of the cape mentioned, either in going north from Itivdlek or in returning; but in his account of the second voyage, Hall states (see p. 68) that, when they returned from exploring Cunningham's Fjord, and the other one close by (to the north of it), the wind being against them, they sailed along the land amongst the islands until they came outside the latter at a point which he says was about three leagues to the north of Queen Sophia's Cape, which implies that the Cape was south of Cunningham's Fjord. Baffin, in his account of the voyage of 1612, also states (see p. 125) that they passed Queen Sophia's Cape in going from Ramel's Fjord to Cunningham's Fjord. It follows that, if the latter is the southern of the two Kangerdluarsuks, just north of Holsteinborg (as we consider that we have proved), Queen Sophia's Cape cannot be Kangarsuk (which is to the north of that fjord), but must be a point on the projecting part of the coast north of, and near to, Holsteinborg; and, as it must have been very conspicuous in the landscape as seen from the sea, it cannot be anything else than the Præstefjeld, which rises just north of Holsteinborg to a height of

1,770 ft. (or, more accurately, an outrunner from it) which, although not really forming a promontory, would appear to do so when viewed from the south. In this case, Hall's indication of the latitude is of little avail, except quite indirectly, as it is manifestly erroneous, being inconsistent with his other statements of latitude. It is only in the explanation to the General Map that the latitude of Queen Sophia's Cape is stated; but the figure (67° 45') cannot be what Hall meant, because Cunningham's Fjord, which, according to his own map, is further to the north, is here stated to be in 67° 25'. The figure 7 is written on an erasure, and though we may pretty safely guess that 66° 45' is meant, no direct argument can be founded on this. At the same time, however, Knight's Islands, which are commonly (and, doubtless, rightly) identified with the Kagsit Islands, are stated by a similar (no doubt clerical) error to be in 67° 58',—that is to say, rather to the north of Queen Sophia's Cape. This would rightly express the relative position of these localities, if Queen Sophia's Cape be the Præstefjeld, but not if Kangarsuk is supposed to be that cape, their real latitudes being: Kangarsuk, 67° 4'; Knight's Islands, 66° 59'; Præstefjeld, 66° 55'.

For the identification of Queen Anne's Cape, we have in Hall's accounts only two data—the latitude (66°) and the circumstance that it is spoken of in language which seems to imply that it was a notable landmark, not only as seen from the west, as in Hall's sketch, but also from the south, in coming up Davis'

Strait. Thus it was the first point which Hall "espyed" on his arrival in 1606 (see p. 65). This could hardly apply to the island of Simiutak, which projects only slightly from the coast-line, and attains no greater elevation than 930 ft., but would be applicable to the mountain of Kingatsiak, just to the north of it, which reaches a height of 1,740 ft., and, as it seems, must be noticeable, looming up over the lower land to the south. There is, however, in Gatonbe's account of the voyage of 1612, a passage exactly to the point, viz., the entry for June 23rd, in which he says (see p. 100) that, within a league of Queen Ann's Cape, travelling northwards, they had to cross a great river, in which the flood caused an excessively strong current, by doing which they came to an island, where they rested till the flood was spent, evidently in order to enable them without trouble to cross the other branch of the river, north of the island; after this, resuming their journey, they rowed past the Cape. There can be no doubt that the river was the Kangerdlugsuak (Sönder Strömfjord in Danish), of which the main branch, south of the island of Simiulak, opens in 66°, whilst the mountain of Kingatsiak is just beyond the northern branch. For these reasons, we believe that the inscription, "Queen Anne's Cape" on Hall's sketch refers, not to the extremest southern point of the sketch, which we take to be the island of Simiutak, but to the large knoll just inside those lower rocks, which we take to be Kingatsiak.

If we now turn to the interpretation of Hall's

sketch (see p. 9), we cannot do better than take Captain Jensen for our guide for the central portion. "The mountains", he says,1 "to the left of Mount Cunningham (Kakatsiak) represent the high land of Akugdlersuak in connection with the mountain of Kakatokak, situated behind; the lower knoll, to the right of Mount Cunningham, may be intended for a mountain called Nagtoralinguak, near the sea, south of the Fjord; and the smaller knoll in front of that must then represent the highest summit of the island Inugsugtusok. Behind these two knolls, the high jagged mountains of Tininilik, Kingartak, and others appear, which form a wild Alpine landscape south of the outer portion of the Fjord of Itivdlek. Even one of the very characteristic parabolic valleys which occur here is clearly indicated in the drawing." Captain Jensen does not continue his interpretation to the lateral parts of the sketch; but, following our own light, we recognise beyond this group of mountains, to the right, the mountain Kingatsiak, which we consider to be Queen Anne's Cape, at the foot of which the lower island of Simiutak appears. Returning to the northern half of the landscape represented in Hall's sketch, we observe, to the left of the mountain district of Akugdlersuak, that the mountains, one behind the other, fall off to some comparatively-straight fjord, penetrating far into the mainland, which fjord we take to be the Ikertok. The

¹ Meddelelser om Grönland, vol. viii (1888), p. 47.

small knoll to the left of this we take to be the islands of Sarfanguak and Manetorsuak; behind which, and beyond the intervening Amerdlok Fjord, Kjærlingehætten raises its cone; behind the small knoll further to the left, would be the entrance to Holsteinborg harbour; and, beyond that again, a more distant knoll represents, in our opinion, Præste-To the left of this, a break in the coast-line, as seen from this point, is noticeable, which we consider to correspond to the receding part of the coast, where the two Kangerdluarsuks enter, which would be hidden behind the Præstefjeld; beyond this break, the coast appears again, and this we consider to be the promontory formed by the lower outrunner from the mountain of Kangarsuk, the summit of which may be covered by the Præstefjeld.

Before leaving this question of the identification of the places visited by Hall in 1605 and 1606, we may observe that, if this has not been solved before, it is due to the fact that Hall's maps were not in the hands of the explorers of the country till a few years ago. Capt. Jensen, to whom we owe the first attempt at rational identification (viz., in respect of King Christian's Fjord), expresses his regret that he was not acquainted with Hall's maps before he went to Greenland to map the coast, as he would then have been able to pay far more attention to details important in that respect. Autopsy is in these matters of very great importance, but we cherish

¹ Meddelelser om Grönland, vol. viii (1888), p. 45.

the hope that future explorers on the spot will agree with the conclusions to which we have come in our study.

On the 10th of July, Hall returned from his excursion to the north in the pinnace and rejoined the *Trost*, lying in the King's Fjord (Itivdlek), and from this point he resumes his detailed account.

Directly after Hall's return, the expedition sailed for Denmark, carrying away four natives whom Cunningham had captured, acting, no doubt, on his instructions. Lyschander says¹ that one of them was so violent that Cunningham found it necessary to shoot him, and that the natives in great numbers tried to prevent the departure of the vessels, but were frightened away by the discharge of cannon. The homeward voyage, however, was uneventful.

On the 10th of August, the expedition arrived back at Copenhagen, where they appear to have met with a very hearty reception. That Greenland had been reached; that there was no insuperable difficulty in re establishing communication with it; and that certain valuable commodities could be obtained thence was known already from Lindenow's report; but (not to mention that some anxiety may have been felt about the ships which had continued their voyage further north) it seems evident that the fact of a large portion of the coast-line having been carefully explored was highly appreciated. Both Lyschander and Bielke state that, when the

¹ Den Grönlandske Chronica, 1726 ed., pp. 112-113.

ships sailed into Copenhagen Harbour, a map of Greenland (doubtless on a very large scale) was exhibited in the prow of *Trost*; and they are profuse in their praises of Hall's skill and diligence in preparing his maps. From their expressions (which, however, contain no information beyond what is known from other sources), it is clear that copies of Hall's maps had been seen by them, as, no doubt, by many others.

Within little more than a month of the return of the Expedition of 1605, Hall was permanently appointed, by Royal Warrant, dated September 20th, a mate (Styrmand) in the Danish Navy, with obligation to serve whenever and wherever he might be called upon to do so. There is no mention of expeditions to Greenland, or any other particular service; but that his appointment really was specially for the intended further voyages to Greenland, on which the King intended him to act as pilot, is evident from the wording of the above-mentioned order to the Treasury (of Feb. 26th, 1606; see p. xxxvi), in which he is described as "our wellbeloved Jacob Hall, of Hull, our Greenland mate". By his appointment, he was to have a salary of 500 Rixdollars (about £85) a-year, besides free lodging and various articles from the Royal victualling yard (such as an ox, so much barley, bacon, butter, etc.) annually, the pay, etc., to commence from September 6th. By way of com-

¹ Sjall. Reg., xv, fol. 50^d.

parison, it may be mentioned that, according to a pay-list of 1658, the ordinary pay of mates in the Navy, even at that time, was from 50 to 90 Rixdollars annually, and that the pay of his captain, John Cunningham, was only 300 Rixdollars in cash, besides the usual emoluments. The officers of the Danish Navy at the time were mostly noblemen of private means, who did not require high pay; but the proportion sufficiently shows that Hall's engagement was on terms highly favourable to him.

That Hall's services were again secured and on such terms shows not only that he had given satisfaction personally, but also that, in Denmark, great advantages were expected from future expeditions to Greenland. More particularly it appears that very high hopes had been raised with regard to the mineral wealth of the country. Lyschander says¹ that the ore brought down by Hall was found to contain silver, 36 Lod (18 oz.) having been extracted from a hundredweight of ore; and, although this statement must rest on some mistake, great expectations were doubtless entertained at the time.

In one respect, the expedition of 1605 had not brought the desired result: the ancient colonies had not been found. The Greenland natives who had been brought home were, of course, objects of great curiosity, but they were not descendants of the ancient colonists. On the contrary, they were evidently so-called *Skrællinger*, which were mentioned

¹ Den Grönlandske Chronica, 1726 ed., pp. 110-111.

in the old Sagas as bitter enemies of the colonists. However, in this respect, it was permissible to hope for better results in the future. Meanwhile, the Greenlanders who had been brought down were treated with kindness, in the hope that, when they returned with a subsequent expedition to Greenland, they would prove valuable as interpreters and as intermediaries generally.

It was soon decided to send out a fresh expedition in 1606, on a larger scale; and, as this would entail considerable expense, the King (who had defrayed the cost of the first expedition out of his ordinary revenue) demanded from the Danish Parliament, which assembled early in 1606, a special tax, in order to raise the necessary funds. This was granted, and in May a second expedition started, under the command of Godske Lindenow.

The expedition of 1606 consisted of no less than five ships: viz., the three which had been to Greenland the year before, a fourth called Örnen (the Eagle), and another smaller vessel, which had been bought in Scotland, and was properly called the Gilliflower, but which was generally known as the Gillibrand, Gillbert, or Angelibrand. Trost was on this occasion commanded by Godske Lindenow, who also held the supreme command of the entire expedition. Hall was again first mate and acted as pilot to the fleet. Den Röde Löve was commanded by John Cunningham, but the name of his mate is

not known. Katten was commanded y Anders Nolk, of Bergen, in Norway, one of the regular mates of the navy, Knight having returned to England. Örnen was under the command of Hans Bruun, according to Hall (who translates his name into Browne), a Norwegian by birth. He was a captain in the navy, and saw much service. In 1610, he commanded Enhiorningen, which Jens Munk took to Hudson's Bay in 1619. On the voyage to Greenland in 1606, he kept a journal, which has been preserved, and which has been mentioned above (see p. xv). Though consisting only of short entries, it is of value as a supplement to Hall's account, and the contents of it will be found in our notes to Hall's account. Bruun's lieutenant and first mate was Philip de Foss, a native of Dunkirk. The seamen of that town possessed a great reputation for boldness and ability, but had at the same time a bad name, as being inclined to piracy, smuggling, and similar irregularities. Foss had been arrested in Norway on some charge of this kind, but, as it would seem, not convicted; for he not only, remained in Denmark, but obtained an appointment as a captain in the navy. That he sailed in an inferior capacity on this occasion may, perhaps, be accounted for by his own desire to take part in the expedition. Örnen is mentioned in several contemporary lists of Danish men-of-war, and is credited in one list with four, in another with 12 guns. She is described by Hall (see p. 80) as a vessel of 100

tons, with a crew of, 50 men. The Gilliflower was commanded by Carsten Richardson, a native of Holstein, who had served in the navy in the reign of Frederick II, and afterwards distinguished himself as an officer on foreign service in Poland and Hungary. According to Hall (see p. 80), the Gilliflower was of 40 tons and carried sixteen men. She was probably but lightly armed.

According to Lyschander, there was a good deal of excitement in Copenhagen in connection with this expedition; but, says he, none were more eager to start than the Greenlanders, who were permitted to accompany the ships to the intent that they might be useful in the intercourse of the expedition with the natives.

Neither Hall nor Bruun report anything very remarkable as having occurred on the outward journey. It is, however, worth noting that Hall kept a sharp look-out for the imaginary Island of Buss, as he had done on the first voyage; and, on this occasion, he explicitly declares that he sighted some land which he took to be the island. There can hardly be a doubt, however, that he was mistaken in this. The point is discussed hereafter in Appendix B. Lyschander implies that the weather was unfavourable, and only two of the vessels—*Trost* and *Ornen*—seem to have reached the shores of Greenland. There they remained from July 27th to August 10th, but seem to have been principally concerned about

¹ Den Grönlandske Chronica, 1726, ed., p. 121.

bringing home as much as they could of the supposed silver ore. The expedition first put into Cunningham's Fjord (the Southern Kangerdluarsuk), whence boat-trips were made to the Northern Kangerdluarsuk and other places in the vicinity. On August 6th the ships removed to Foss Bay (Ikertok), which they explored, setting sail for home on the 10th. Trade with the natives was very slack, partly because the latter seemed backward in offering their goods, partly (as Lyschander seems to imply) because the ship's crews were so worn out by the toilsome voyage that they thought more of resting and refreshing themselves than of trading. On the day before the expedition left Greenland, a young man who had been servant to Lindenow the year before was sent on shore in order to remain in the country. He was supplied with various requisites, the better to enable him to maintain himself there. This was done by way of punishment, or, rather (as Lyschander implies), by way of commutation of the punishment he had incurred for some misconduct which is not specified. Lyschander says that he was at once torn to pieces by the Greenlanders, thus receiving his punishment at their hands, after which the Greenlanders fled at once, but he adds that no pity was felt for the man by the Danes, and that these were not inclined to quarrel with the Greenlanders on that account. This explains the fact that, in the afternoon of the same day, several natives came to the ships, of whom five (Lyschander says six) were secured,

with their boats, and carried captive to Denmark, probably because the most intelligent of those which had been brought down the year before had died.¹ The homeward voyage was commenced on August 10th, and Copenhagen was reached on October 4th.

It may be of interest here to notice the subsequent fate of the Greenlanders brought down to Denmark by the two expeditions. According to Lyschander² and the anonymous treatise relating to the Greenlanders, the two whom Lindenow captured in 1605, were very different from those afterwards brought down from the West Coast, being of a very savage disposition, coarse in manners, inclined to bite like dogs, and greedily eating anything they could lay hold of. Lindenow, however, succeeded in taming them to some extent, and taught them to run about the ship in obedience to signs from him. When he arrived home, and the King and the Queen came aboard Den Röde Löve, Lindenow made the Greenlanders show their prowess in propelling their kayaks, on which occasion they held their own in a race against a boat of sixteen oars. The three brought down by Cunningham were much more tractable; they soon associated with the crew; and, when the Trost entered the harbour of Copenhagen, they outraced the sailors up the stays to take in the topsail. Lyschander narrates

¹ Lyschander, Chronica, 1726 ed., p. 124.

² Den Grönlandske Chronica, 1726 ed., pp. 114-118.

that, just then, a Spanish Ambassador arrived at Copenhagen, in honour of whom various festivities took place. On one occasion, he was shown the Greenlanders with their implements, etc., and three of them, in their boats, performed a kind of dance, cutting figures with their kayaks in a wonder-The Ambassador was so delighted that he sent them handsome presents of money, which they laid out in fashionable clothes, mantles, hats with ostrich feathers, swords, and spurs, in which attire they marched up to the Castle "like Greenland Grandees". They were well taken care of, fed with such things as they were accustomed to, and had very much their liberty. The King, himself a devoted sailor, took much interest in their performances with their boats, and had one built on the Greenland pattern, but arranged for two men. Thus the winter passed by no means unhappily; but, when spring of 1606 arrived, they availed themselves of their liberty to attempt an escape in their boats. Whether all of them, or some only, took part in it, Lyschander does not say; but, in any case, the runaways did not get far. They came on shore somewhere in Skaane, and were detained by the peasants. After that, they were more carefully watched, the intention of the authorities being to send some of them back to Greenland with the next expedition, in the hope that, if they returned to their friends and told them how well they had been treated and what they had seen in Copenhagen, the natives would meet the expedition with confidence,

and friendly relations would be permanently established. A difficulty was the language, which the Danes could make nothing of: two words were all that they could catch—viz., Oxa and Judecha, which were thought to be the names of two of them. When the second expedition sailed, at least two of them were put on board-Oxa on Örnen, another (whose name Hall gives as Omeg, possibly the same as Lyschander's Judecha) on board Trost. Unfortunately, they both died on the voyage up, and the intention of the government was thus entirely frustrated. Whether the other vessels had Greenlanders on board is not known with certainty; but, as they never reached Greenland, this is of no consequence. As it was, the fact of none of the captives returning could not but be very prejudicial to the intercourse between the expedition and the natives. Some more, however, were secured with the same intention, four of whom arrived safely in Denmark; but, as the expeditions to West Greenland ceased, neither they nor those who had been brought down before, ever had an opportunity of returning. Nothing further is told of them in any contemporary record; but Isaac de la Peyrère, who came to Copenhagen nearly forty years later, gives, in his Relation du Groenlande, some particulars, based on what was told him, concerning them. He says, what will readily be believed, that, in spite of all care, they did not survive long, though a couple of them lived ten or twelve years in Denmark. Moreover, he narrates, but without giving his authority, that, when

only two were left, one of them was employed in the pearl-fishery, and died from exposure, the work having been continued too late in the season. The solitary survivor made a desperate attempt to return to Greenland, but was overtaken and brought back, after which he pined away and soon died.¹

As the expedition of 1606 did not visit any localities other than those which had been visited the year before, no fresh geographical discoveries were made; and, as the ore brought down turned out valueless, the result of that voyage was altogether disappointing. It became clear that, whatever profit might be made by private traders, expeditions like those of 1605 and 1606, sent out at the expense of the State to the parts hitherto visited, would not pay in the long The portions of Greenland which had been visited did not at all correspond to the descriptions given by the ancient writers, which implied the existence of comparatively fertile land, suitable at least for grazing, and upon the whole much more favourable conditions of existence than those disclosed by the reports of the two expeditions. the same time, there remained still unsolved the question of the sites of the ancient Scandinavian colonies, of which no vestiges had been found. This negative result, however, was not altogether discouraging, as the settlements were generally supposed to have been in the southernmost part of Greenland,

La Peyrère, Relation du Groenlande, pp. 182-185.

not far to the east of its southern extremity, more particularly in the neighbourhood of a certain large fjord, called Eriksfjord in the ancient writings.

Moved by such considerations, King Christian IV resolved to make one more attempt, and a third expedition was sent out in 1607, with the special object of finding Eriksfjord. It was on a much smaller scale than the foregoing ones—only two vessels, under the command of Carsten Richardson, being employed.

Whilst the Letters of Instructions given to the commanders of the expeditions of 1605 and 1606 have not come down to us, an official copy of the corresponding document with reference to that of 1607 is still in existence.1 It is an elaborate and interesting document, dated May 6th, 1607, but too long to be reproduced here.2 After referring to the two former voyages, and setting forth the statement of the ancients concerning the Icelandic settlement in Greenland, and especially that on Eriksfjord, the document enjoins those entrusted with the King's commands to sail from Cape Lindesnæs by a W.N.W. course, so as to approach the east coast of Greenland, between lat. 60° and 61°, in which part Eriksfjord was thought to be situated. Having found that locality, they were to examine diligently the condition of the

¹ Sjall. Reg., 1607.

om Grönland, vol. ix, pp. 12-14.

harbours, to ascertain he movements of the ice and the best time for sailing there, and they were ordered to erect beacons to indicate good anchorages. They were further to inquire whether the churches, monasteries, farms, etc., which were found merated by the old records, were still there; also whether there were any bishops, clergy, or civil authority. Considering their own small numbers they were to be very careful in landing, and they were to treat the natives with the greatest friend-"We do not doubt"—the Instructions say— "but that they understand Icelandic or Old Norse, and We have therefore ordered persons from Norway and Iceland to be sent, that may be able to converse with them, and thus learn everything so much the better." . Having acquainted themselves with everything at Eriksfjord, the members of the expedition were to explore the country further north, and they were not to commence the homeward journey before the 3rd of August. The crews on both vessels were to be entirely under the command of Carsten Richardson, but "Jacob Hald" alone was to direct the navigation, in which the commander and his men were to assist him, unless they should perceive that he did not act in good faith. especially mentioned that Frost was not to carry more sail than would permit the smaller vessel to keep pace with her, --- an order which reminds one of Lindenow's complaint on the first voyage (see p. xlii) that he was continually left behind. They were specially ordered not to give any information

to anybody on their return, but simmediately to report everything to the King.

Besides Trost, commanded by Carsten Richardson, a smaller vessel was sent, which was called The Greenland Bark, probably on account of her being destined to take part in this expedition, As it is stated in the Instructions that the total of the crews would only be forty-four, it is evident, both that the second vessel must have been quite small, and that the complement of the Trost had been a good deal reduced.

Lyschander says¹ that Hall especially prepared himself for this voyage by studying the accounts of previous voyages, particularly those of Frobisher. In explanation of this, we must bear in mind that Sir Martin Frobisher, misled by the map of the Zeni, mistook Greenland for the imaginary island of Frisland. That Frobisher and his company were under no mistake as to where the localities which they discovered and named Frobisher's Strait were situated, is evident from Capt. Best's account and the map which accompanies it.2 On the latter, Frobisher's Strait is seen extending just north of Labrador, from the eastern to the western coast of America; but in Frobisher's time it was not known-at any rate, he did not know-that Greenland was separated from the continent of

¹ Den Grönlandske Chronica, 1726 ed., p. 129.

See Best's True Discourse (1578), and Collinson's Three Voyages of Frobisher (Hakluyt Society, 1867).

America by a great branch of the sea, afterwards explored by Davis; he did not know that Greenland was aught but the East coast of America, and thus it came to pass that he, as he says, judged the land which he discovered and named "Meta Incognita", to be a part of Greenland. To us, with our geographical knowledge, it is clear enough that Frobisher's description of his "Strait" and other localities near it as being situated in Greenland rested on a mere misnomer. But the geographers of the day clung blindly to the name; and, when Davis had recognised Greenland as Greenland, they transferred Frobisher's Strait from the East coast of America, where Frobisher had placed it, to the East coast of the real Greenland—first to a position near the southern extremity of the country, and afterwards to a higher latitude more in harmony with Frobisher's statement. Under these circumstances, it was quite natural that, just as Davis (who really followed close in Frobisher's footsteps) had no idea that he was going over the same ground, and, when he passed Frobisher's Strait, thought that he had made a new discovery and called it "Lumley's Inlet", so Hall, when he was ordered to search for Eriksfjord on the south-east coast of Greenland, thought that he was going to explore the land where Frobisher had been.

The expedition of 1607 left Copenhagen on the 13th of May, and took, according to Lyschander,1

¹ Chronica, 1726 ed., p. 128-139.

the same route as before (stopping as usual at Flekkerö) as far as Fair Isle; but then they stood more northerly. On the 8th of June, in lat. 59°, they sighted the east coast of Greenland, though at a considerable distance. Approaching nearer, they searched in vain for anchorage. The weather was unfavourable, and storms separated the vessels more than once; the bark particularly seems to have had difficulty in clearing herself. Advancing to lat. 63°, they imagined themselves to be opposite the place where Frobisher had reached land; but the ice prevented approach. They sailed to and fro, ranging as far north as lat. 64°, and at last, on the 1st of July, made a desperate effort to force their way through the ice; but, after incurring great danger, they had to give it up. "There stood the captain and the steersman," says Lyschander, "and looked like Moses into the land of Canaan, but they were forced to remain outside." Meanwhile, the crews had suffered greatly from fatigue and cold, and complained that they could not stand it much longer. At the same time, their fresh-water supply began to give out. A terrible gale then supervened, and Hall (says Lyschander) thought that they were in the same neighbourhood whence formerly some Spanish ships had been driven as far as the Coast of Russia. They at last decided to run for Iceland, in order to refresh the crew, but the tempest prevented them from reaching it, and they set sail for home. reached the southern extremity of Norway, they endeavoured to put into Mandal, but were again prevented by stormy weather, and they arrived back at Copenhagen on the 25th of July, without having set foot on land since they left Flekkerö on the voyage out. They at once reported their failure to the King, who was on the point of starting for Norway.

Lyschander says¹ that, although no success had attended this last expedition, the King did not mean to give up the matter, otherwise than for a time. But, as a matter of fact, it was not till the middle of the century that another attempt was made to discover the site of the lost colonies.

Before we proceed to consider the English Expedition of 1612, which was commanded by Hall, a few words with regard to his personal life may suitably find a place.

When the expeditions to Greenland were abandoned for a time, Hall's services as "Greenland pilot" would naturally cease to be required; but it is not known when his engagement in Denmark terminated. In any case, it is not likely that he continued long on such extraordinary terms as those above detailed (see p. lxxxv).

It appears from a document to which we have already alluded (see p. xxxv), and which will also be mentioned in our Introduction to Munk's Voyage, that, at some time not specified, the Danish Government consulted Hall as to his opinion on the possible existence of a North-West Passage and on the best

¹ Chronica, p. 139.

way of searching for it. But, as there is no date to this paper, it affords no evidence as to how long Hall remained in Denmark. In fact, as to how Hall was occupied during the interval between his return, in July 1607, from the latest Danish voyage with which he is known to have been connected, and his departure upon his last fatal voyage in April 1612—a period of nearly five years—we have no information whatever. That he was at sea during the whole, or the greater part, of this period, we can hardly doubt, for such an able and experienced seaman would not be likely to remain long unemployed; but, as to whether he sailed in the Danish or in the English service, or on his own account, there seems to be no record to show.

That a return of Hall to the Danish service (if, indeed, he ever left it) was afterwards thought of may, as it seems, be inferred from a Royal warrant of March 1st, 1611, 1 concerning the appointment of eleven new captains "to serve by land and by sea", with a salary of 200 Rixdollars annually and certain other emoluments. One of the names on this list is that of "Jacob Halle", which can scarcely refer to any other than our James Hall. Another was that of Jens Munk, of arctic celebrity. That so many were to be appointed together was, doubtless, due to the imminent commencement of hostilities with Sweden.

¹ Sjall. Reg., xv, f. 327 a.

There is, however, no evidence of Hall having served, or, indeed, of how his name came to be on the list; but its appearance shows, in any case, that he had left a good reputation behind him.

That Hall's occupation during these years, whatever it may have been, was more or less satisfactory to him pecuniarily, we may, however, infer from the fact that he was himself an "adventurer" in the voyage of 1612.

As regards the origin and object of the Expedition from England to Greenland commanded by Hall in 1612, the information now available is ex-

¹ There appears, at first sight, to be some grounds for supposing that the year should be 1613. These appearances, however, are certainly delusive, and probably rest upon some confusion-perhaps merely upon clerical errors—for the reference by Gatonbe (see p. 85) to Good Friday as falling upon April 10th, together with numerous statements in both his and Baffin's accounts as to the incidence of various dates on certain days of the week, proves conclusively that the Expedition sailed as has been hitherto supposed, in 1612. Neither Gatonbe nor Baffin mention the year expressly in the body of their narratives, though 1612 is given in the headings of both. These headings are, however, open to doubt, as being possibly due, in one case, to the editor of Churchill's Collection of Voyages, and in the other to Purchas. It will be noticed (see p. 85) that Gatonbe, in his Dedication, which is dated February 25th, 1615-16, speaks of having been prevented from completing his narrative by absence from home " these two yeares". The two years were, apparently, 1614 and 1615, which seems to show that the expedition went out in 1613. Furthermore, the label on the Kayak at Hull (which was presumably brought home by Hall's last Expedition) speaks of the voyage having been made "Anno Domini 1613" (see p. 112, n.; also

tremely meagre; though, of the voyage itself, we have two fairly-good accounts (see pp. 82-137).

Gatonbe, the author of one of these accounts, says (see p. 82) that it was equipped by "the Merchant Adventurers of London", Sir James Lancaster, Sir Thomas Smith, Sir Richard Ball, and Mr. (afterwards Alderman Sir) William Cocken, or Cockayne, whilst Hall himself (besides being in command) had a share in the venture. By the term "the Merchant Adventurers of London", Gatonbe probably does not mean the members of "The Company of Merchants of London, discoverers of the North-West Passage".1 At the same time, the four gentlemen named as having been associated with Hall were all, except Ball, members of that Company. This, however, was probably a coincidence merely; for, as stated elsewhere (see pp. 83 n. and 84 n.), they were leading merchants of their time. No doubt the Expedition was not undertaken by any of the Chartered Trading Companies of the time, but it was sent out jointly by the five gentlemen named.

Markham's Voyages of Bassin, p. 28 n.). It is remarkable, too, that Foxe in 1635s (see the North-West Foxe, p. 57, and Christy's Voyages of Foxe and James, p. 96), omitted to mention the year in which it was undertaken, as though he was in some doubt upon the point; and this is the more remarkable because Foxe evidently had some personal knowledge of the Expedition, inasmuch as he states that it sailed from Kingston-upon-Hull, a fact which is not stated by Purchas (upon whose narrative Foxe clearly based his), while Purchas gives the date 1611, which Foxe omits.

¹ See The Voyages of Foxe and James, pp. xx and 642.

As to the precise object of the voyage we can only guess. The formal Letter of Instructions from the "adventurers" to the Commander is missing. Gatonbe (or his Editor) describes it as "a voyage into the North-West Passage", but it cannot be regarded as a voyage in search of a North-West Passage (see p. 82, n.3). Certainly, just at that time, immediately after Hudson's discovery of the inland sea called after him, no object of an expedition to the North could be more But there is nothing in the accounts popular. themselves to show that any other object was aimed at, than to trade on the coast of Greenland and to fetch home silver-ore from the mine, which Hall imagined himself to have discovered in 1605. For this purpose, a goldsmith was sent out with the expedition, in order to ascertain, on the spot, whether the substance in question was argentiferous That Hall himself still believed in the reality of his discovery, notwithstanding the negative results obtained at Copenhagen, is evident from passages in both the accounts we have of the voyage (see pp. 105 and 123). It is therefore not improbable that he himself may have been the prime mover in starting the expedition. However that may be, it was commercially a failure, for no silver-ore was discovered; and, if an attempt to find North-West Passage was originally contemplated, it had to be abandoned after Hall's death, which took place at the hands of the Esquimauron the Greenland coast. Nor was it at all likely that a voyage would have

been undertaken in search of a North-West Passage in 16,2; for Button's Expedition left England within a few days of the one in question and it was hardly likely that any further expeditions having the same object would be sent out until Button had returned.

Nevertheless, the voyage is of interest as a continuation of the voyages of 1605 and 1606; while the geographical results were not inconsiderable. The expedition reached land on the west coast of Greenland further south than on the previous voyages, and was thus enabled to explore a fresh line of coast; besides which, some of the places previously discovered were revisited. It will have been noticed that the information given concerning these in the accounts of the voyage of 1612 is of not a little assistance in identifying them.

The Expedition consisted of two ships, the Patience ("Admiral") and the Heart's Ease ("Vice-Admiral").

The Patience (in which Hall himself sailed) was a vessel of 140 tons burden, and carried a crew of forty hands. She had come home from Bordeaux a short time before starting for Greenland, as appears from the following entry among the Records of the Trinity House at Hull:—

- "The Account of Mr. John Woodmancy for his first Quarter ending March, 1612.
 - "Item.—Of the Patience from Bordeux."

This means that the vessel had arrived at Hull from Bordeaux a short time previous to the date

named, and was then paying dues to the Corporation. It may be further explained that every year, in the month of September, the Brethren elect a Senior and a Junior Warden. The "First Quarter" of the former is from September to December. The Junior Warden then acts from December to March, and then the Senior again from March to June, the Junior Warden winding up the year of office by acting from June to September.

Hall's master or chief mate on board the Patience was William Gordon, who afterwards served in the same capacity on Jens Munk's expedition to Hudson's Bay in 1619, under which we shall notice his antecedents. John Gatonby (or, as he spells it, Gatonbe), who wrote one of the accounts of the voyage (see pp. 82-119), was one of the quartermasters of the same vessel, though, after Hall's death, he became chief-mate on board the Heart's Ease. He doubtless belonged to a family of mariners of good standing in the town of Hull, members of which, at various times during the sixteenth century, held prominent positions in connection with the Trinity House there. Thus, according to Mr. Markham (Voyages of Baffin, p. 2), a Nicholas Gatonby was Steward in 1577, and Warden in 1587, 1591, 1596, 1602, and 1609. This man was, in all probability, the father of the John Gatonbe in question, who incidentally mentions (see p. 84) that his father's name was Nicholas. It is to him, too, that the following entry, which is taken from the Register of

Admissions of Freeman in the Hull "Bench Book No. 1" (fol. 70), probably relates:—

"Nicholaius [sic] Gatonbie decimo quarto die Januarii anno regni domine nostre Elizabeth' Dei graciæ Anglie ffraunc', et Hibernie regine, fidei defensoris etc. decimo secco [2573-4] admissus & iuratus est burgensis huius ville per apprenticium Thome Brewster, marinafii, si resident etc., aliter non, etc., et adiudicatur solvere iijs. iiijd eo quod venit post terminum elapsum."

Another entry in the same Book (fol. 201), which relates, with very little doubt, to the John Gatonbe in question, runs as follows:—

"[18Oct., 1610]. Johannes Gaytonbie, die predicto, admissus et iuratus est burgensis ville predicte per patrimonium Nicholai Gaytonbie, patris sui, si, etc. Et iuratus est domino Regi, etc."

Furthermore, a John Gatonby (probably not the man we are discussing, but perhaps his uncle) was Steward in 1570 and Warden in 1578 and 1586; while a Nicholas Gatonbe (perhaps the one above-mentioned, but more probably his son), who very likely owned the *Patience*, made voyages in her to Greenland and brought home cargoes of oil in 1616 and 1618, the whale-fishery having at that period been energetically prosecuted from Hull.

The Heart's Ease, a vessel of 60 tons burden, belonging to Hull, and having on board a crew of twenty hands, was commanded by Andrew Barker, a man of high standing in the sea-faring community at Hull. In Gatonbe's account (see p. 108), he is

described as a wise, ancient, and influential man, who had had charge of ships as much as twenty years earlier, and had also held other responsible commands in various parts of England. Barker was admitted a younger brother of the Trinity House at Hull in 1594, and was elected Warden in the years 1606, 1613, and 1618. The following entry concerning him appears in the above-mentioned Register of Freeman (fo. 150):—

"[22 Dec., 40 Eliz. (1597)]. Andrew Barker, eodem die et anno, admissus et juratus est Burgensis huius ville per apprenticium Roberti Tailor, Aldermanni, et marin^r, si resident, aliter non, et quid venit post terminum elapsum etc. solvit pro fine xxs. quos solvit."

He placed in a compartment of the east window of the old Chapel of the Trinity House at Hull a stained-glass figure of St. James-the-less, which, however, has now disappeared. He was still living at least as late as 1621; for a letter from the Trinity House in London, dated June 4th in that year, and having reference to Harbour Dues, was addressed to "Or loving friend Master Andrew Barker, Collect of the Duetyes for the Lights and Booyes of Castor and Stamport in the Port of Hull". On board the Heart's Ease was also William Huntriss, who, as a boy, had been with Hall to Denmark and had

¹ See Markham's Voyages of Baffin, p. 27, n.

² Trinity House Transactions, 1609-1625, among the records of the (London) Trinity House.

accompanied him on his voyages thence to Greenland. Huntriss probably held the post of master; for, when, after Hall's death, Barker took charge of the Expedition, he became captain of the Heart's Ease. On board this vessel, too, was young William Baffin, who wrote the account of the voyage of which Purchas printed a portion. He afterwards became famous as an Arctic Explorer, but what post he held on this occasion is not known (see p. 120, n.).

The incidents of the voyage require but brief notice here. Hall, on this occasion, adopted a plan different from that he had followed in 1606. He had then sailed up Davis Strait, as far as lat. 66°, to the westward of the great bank of ice which occupies its central portion, and had then strucks eastward for the west coast of Greenland. He now made direct for Cape Farewell (as he had done in 1605), and kept close along the belt of ice lying off the shore, in order to avail himself of any opportunity of getting through to the land. He was, in consequence, able to examine a portion of the coast which he had not visited on any of the Danish Expeditions. He first came to land on May 27th in the vicinity of what is now the Settlement of Godthaab, in lat. 64°, some two degrees south of the southernmost point he had touched on any previous occasion. This locality Hall called the Harbour of Hope, and

[•] If, as we believe (see p. xxxii), Hall had been with Davis, he probably was familiar with this harbour; for Davis (the only man

he also named several other places in the vicinity. Here the Expedition remained several days in order to fit together a pinnace and a shallop; but they departed on June 16th, and the next day came into a harbour they called "Cockenford", which appears (see p. 99, n.) to have been the Southern Isortok Fjord. Here Hall left his larger ship, the Patience, and proceeded in the smaller, the Heart's Ease, on an exploring trip along the coast to the northwards, very much as he had done in 1605. He was accompanied by Gatonbe and twenty-two men and boys. On the 26th, he reached the King's Fjord (Itivdlek), the southernmost locality he had visited on the expeditions of 1605 and 1606. By the 26th, he had returned to the Patience in "Cockenford"; and, by the 15th of July, he arrived once more King's Fjord (Itivdlek) with both his ships.

From the King's Ford, on July 18th, Hall again started off northwards in the Heart's Ease, his object being to reach the supposed silver mine in Cunningham's Fjord (the Southern Kangerdluarsuk), the Patience being meanwhile left anchored in the King's Fjord. Halting, however, on the 22nd, in Ramel's Fjord (Amerdlok), Hall was killed by a Greenlander with a dart as he was in a boat by the ship's side. He was buried on one of the islands near the shore, and his men afterwards proceeded to

known to have visited this coast previously), in 1585, had named the harbour Gilbert Sound, after Sir Humfrey Gilbert.

the mine; but, when the goldsmith had tried the ore and pronounced it valueless, they decided to return to the Patience in the King's Fjord, where they arrived on the 25th. After some quarrelling, Barker was chosen "General" of the Expedition, with Gatonbe as his first mate on board the Patience, while Huntriss took command of the smaller ship. Then, Hall being dead, preparations were at once begun for the return home, which commenced on August the 4th.

On the voyage, the vessels became separated, the *Patience* reaching London on September 19th, while *Heart's Ease* arrived (contrary, apparently, to Barker's order; see p. 110) on the 17th at Hull, to which port she doubtless belonged. The following entry relating to her appears among the records in the Trinity House at Hull:—

"The Account of Mr. Robert Tailor for his First Quarter ending March, 1613.

"Item.—Of the Patience from northward."

Gatonbe's account of the voyage of 1612, as printed in the Churchill's Voyages and Travels, is accompanied by a map of Greenland, on which the names of the places visited, and of a few other places, are inserted; but, in the text, there is no reference to such a map, nor is anything stated by the editor as to its origin. The circumstances fairly interpreted imply that the editor thought that it belonged to the account; but, as this was printed about 120 years after it was written, we have no means of knowing with any certainty whether or

not it did originally belong to it, or by whom it was drawn. Two circumstances are in favour of ascribing it to Gatonbe, or to some other member of the expedition of 1612—viz., that it exhibits some of the peculiar misconceptions of that time (such as the presence of Frisland and Busse Island); and, secondly, that amongst the names there is one which does not occur in any of Hall's accounts of his voyages, not on any map then published, but only on Hall's unpublished General Map of his discoveries in 1605, vis., Prince Christian's Fjord (IV, g), here transformed into "Princeford". Nevertheless, the map is of no use for the identification of the localities, as it is drawn on much too small a scale to pretend to anything like accuracy, beyond the most general features; several names are misplaced (Wilkinson's Islands being far from the Harbour of Hope; the "Silver Mine Supposed" far north of Princeford); while the scale of latitudes (very likely added afterwards) is quite erroneous, not at all agreeing with Hall's statements in the explanation to the General Map, or even with those in his text. Of course these circumstances deprive the map of any great interest as illustrating the account of the voyage, or as a contribution to the history of cartography; and this is the reason why we have not reproduced it. The names appearing on the south and west coasts of Greenland, proceeding northwards, are as follows: Cape White, Cape Farewel, Cape Desolation, Cape Comfort, Wilkinson's Islands, Mount Hatcliff, Harbour of Hope, Cape Cheese, Cockenford, Queen Anne Cape, Mount Cunningham, Kingsford, Romblaford, Princeford, and "Silver Mine supposed". For all of these, except Cape White (which occurs on Hessel Gerritsz.'s map) and Cape Cheese (which we cannot explain), the text and our preceding remarks will account. For some further observations on this map, see Appendix A, p. 161.

The track map facing the title page, to which we alluded on p. i, is destined to show the routes taken by the expeditions of 1605, 1606, and 1612, within Davis Strait; but it has no reference to the expedition of 1607, which remained on the east side of Greenland, and of which we possess too little information to be able to lay down the track followed. The red lines on the map are intended to represent the actual sailing of the expeditions in question as accurately as the scale of the map and the available information permit; the letter n after the date indicating the places where the latitude was observed. Some portions, however, of these tracks must necessarily be more or less conjectural, owing to the defects of the records. With regard to these conjectural portions, some explanations, which ought to have been given in foot wetes to the corresponding passages of the text, may find place here, together with a few other additions and corrections, for which we beg the particular attention of our readers.

ADDITIONAL NOTES,

Pb. xxix-xxx. As so little is known of Hall personally, it seems worth while to state that, among the marriages recorded in the registers of Holy Trinity, at Hull, are those of Anne Hall with Thomas Haryson on June 3rd, 1594; of William Ramsden with Mrs. Anne Hall (both of Holy Trinity Parish) at St. Mary's Church, on February 20th, 1650; and of William Bysseele with Eline Hall in June 1662. Among the burials recorded in the parish of St. Mary are those of Joshua Hall (ex-Mayor, etc.), on April 19th, 1643; Mrs. Ann Hall, on Jan. 23rd, 1665; and of William Hall (Sheriff), in October 1691; while, among the marriages, that of John Hall (merchant) with Mary, daughter of Mrs. Hollis, on Dec. 11th, 1656, is recorded. For this information we are indebted to the kind researches of Mr. J. Tindal Wildridge, made by permission of the Town Clerk of Hull. Hall is known to have been a native of Hull, some of these persons may have been relatives of his; but as the name is far from uncommon, it is, of course, very uncertain.

- P. xliv, L. 17. The Lion's homeward course, as shown on the track map, is quite conjectural.
- P. Ixxi, 2. 19. For some further remarks on the question of Hall's having noticed the Bay of Disco, and on the indication of the entrance on the Stockholm chart, we refer our readers to Appendix A. See pp. 142-143.
- P. lxxvi, l. 19. For "visited", read "explored". The place was visited in 1605, as stated just before, but only cursorily.
- P. 7, **. 1. As stated on p. 152 **., the name of Cape Desolation occurs on Barentz's Map of 1599, from which source Hall most likely had it.
 - P. 28, 1. 4-5. On this passage, see Appendix A., p. 146.
- P. 30, n. 2. There is no occasion to suppose the latitude.
 59° 50′ erroneous. Sailing, as Leyell says, westwards, on the

d.

ard, with a N.W. wind and, probably, a strong current from the north, the would be very likely to be driven southward, even if they did not actually steer S. of W. Hall's statement that, when they observed on the 4th, they had been steering N. and N. by W. since the morning, and that they had made way W. by N. 24 leagues for course since noon on the 3rd), imply that they had been further S. on the previous day, as shown on the track map.

- P. 33, l. 12-16. It should be noted that these statements about the currents in Davis' Strait are not in accordance with our present knowledge. As is now well ascertained, a strong Arctic current descends through Davis' Strait, following the American shore, past Labrador, far down the east coast of the United States; whilst a contrary current flows up the eastern side of the Strait as far north as lat. 63° or 64°. This is the continuation of the Polar current descending along the east coast of Greenland, which sweeps round Cape Farewell, and is very marked along the west coast of Greenland as far as the latitude mentioned, gradually spreading to the west, until it is neutralised and absorbed by the current from the north setting through the Strait. The current flowing northwards round Cape Farewell is of varying extent and force, but does not appear to be wider than from twenty to thirty miles. See Capt. Wandel's hydrographical observations on Davis! Strait (Om de hydrographiske Forhold i Davis-Strædet, in Meddelelser om Grönland, vol. vii, 1893).
 - P. 49, n. i. "The Stateholder of Denmarke" was, no doubt, the Stadholder, or Governor, of Copenhagen, which post at that time was held by Breide Rantzau. This fact seems to corroborate our suggestion (p. lxviii) that "Brade Ranson", is a corruption of Breide Rantzau, as it would be natural to name from the Statholder the fjord where a criminal was left behind by his order.
- P. 56, 2. 2. The statement that they accounted themselves to have made way S. by W. about ten leagues from noon the 11th to noon the 12th, is not compatible with the statement that, during that time, they had dropped from lat. 66° 10′ to 62° 40′. At the same time, it is not credible that, however favoured by wind and current, they should have made an actual run of something like ten miles an hour during those twenty-four hours, including a cast N.W. for a couple of hours to avoid the ice. It is strange, too,

that, from the 13th noon to the 15th noon, they should have not made more progress than what is implied by the differences in the latitudes stated to have been observed on those days, viz., 60° 17' and 59°. It can scarcely be doubted that some confusion has here crept into the text, and the most reasonable conjecture seems to be that the figures indicating the latitudes observed have somehow been inserted under the wrong dates. If we suppose that the figure 60° 17' really belongs to the 14th July, that of 62° 40' to the 13th, and that the true figure for the 13th was between 64° and 65° (perhaps 64° 40', which might have been confounded with 62° 40', and thus occasioned the mistake), the distances made on these respective days will appear much more reasonably distributed; and it is on this conjecture—since one had to be adopted—that we have here laid down this part of their track on Their actual run during the first twenty-four hours the map. would, in that case, have been quite 110 miles, which, considering that for some time they were impeded by ice, would be quite enough to excite attention.

- P. 60, n., and p. 62, l. 23. Owing to the absence of any information concerning their sailing from the 10th to the 13th of July, it was impossible to mark their progress during these days on the track map otherwise than by a straight line. Something similar holds good with regard to their course between the 14th and the morning of the 18th, during which time they appear to have steered N.E., but really to have sailed N. by W.
- P. 64, 1. 12. North-east is obviously a misprint for north-west, as appears from the entry under 24th.
- P. 70, n. 1. The statement that the tide in Foss Bay flowed S.E. and N.W. would apply to the Kangerdluarsuk between Ikertok and Itivdlek, a portion of which trends in that direction; and it is quite probable that this really is what Hall calls Foss Bay. The figure for the latitude, 66° 25', may in that case be a misprint for 66° 45'. If Foss Bay be this Kangerdluarsuk, the argument on p. lxxv would have to be modified, but it would not really affect the identification of Ramelsford with Amerdlok, or of Skaubofjord with Ikertok.

P. 78, n. 4. This note should be omitted.

- P. 78, n. 5. For "On the 21st, in the morning", read "On the 24th, in the morning", etc.
 - P. 82, n. I. This note should be omitted. See p. cii, n.
- P. 90, 1. 5. The word "again" seems to have been repeated by a clerical or printer's error, as no previous sailing to the N.E. is recorded. When they stood in to land the day before, they sailed N.N.W.
- P. 90, l. 17; p. 92, l. 13, and p. 112 n. Gatonbe's statement (on p. 91) that, at noon on the 18th, they were in lat. 59° 53' and yet only ten leagues away from the land of Desolation, is not in accordance with the true position of the latter. regard, however, to this statement, and to the statement on p. 92 that on the 20th, when in lat. 61° 33', they were some thirty leagues northward of Desolation, it should be remembered that Gatonbe, as it appears from his entry under Aug. 15th (p. 112), believed the Cape of Desolation to be in about lat. 60° rg'. It is quite possible that, on this latter occasion, he may have mistaken Sermersok for Desolation; but his words do not imply that he saw any land, or determined the latitude of any cape, at all on Aug. 15th. The meaning of his words may simply be that, finding himself in the latitude of 60° 19', and believing that Desolation (which he had seen repeatedly on his way out) was in about that latitude, concluded that it bore east of him, twenty leagues. In the same way, Hall, on his return voyage in 1606, when in lat. 50° 10', states (p. 75), by a mere guess, that Cape Desolation then was bearing W.N.W. 1/2 N. about sixty-four leagues off, at which distance, of course, he could not see it.
- P. 93, 1. 7. On the track map we have credited them with a long run due west, on the 22nd, although nothing is said about it in Hall's account, because it seemed possible only by such a supposition to account for their meeting ice, on the 22nd, fifteen leagues from land, whilst their distance from shore on the 21st was only six to seven leagues; and also for their crossing the 63rd parallel on the 23rd, only 5 minutes to the north of their latitude at noon 22nd, and sailing N.E. at the time.

P. 123, n. 2. For "(see p. 134)", read "(see p. 135)".



EXPEDITIONS' TO GREENLAND,

1605, 1606, 1607, AND 1612.

A Report to King Christian IV of Denmark on the Danish Expedition to Greenland, under the Command of Captain John Cunningham, in 1605.

By JAMES HALL, CHIEF PILOT.

[From AN ORIGINAL MANUSCRIPT IN THE BRITISH MUSEUM (MSS. Bibl. Reg. 17A, xlviii, p. 261).]



OST MEIGHTYE, HEIGH, AND RE-DOVBTED PRINCE: fforasmuch as it hath pleased God and youre heighnes to appointe me as printipall pilote for the conductinge of youre Maiestie's shippes vnto¹ settinge with me as

Captaine an honnest and faythfull Gentleman, Captaine John Conningham, youre Maiesties servante²: Therefore I can doe no lesse but in duetye to certify your Heighnes of oure proceedinges, to whome of reight it belongeth.

¹ Something appears to have been omitted here, probably only the word "Greenland".

² For a notice of Cunningham, see the Introduction.

THEREFORE maye it please youre Maiestie to understande that we depted from Copemanhaven the second daye of in this presente yeare of oure redemption, 1605 we cominge to an anker that neight at Elsonure? where we ankered to take in oure water where in the meane tyme, the Captaines and Levetennants, with the other steeremen,8 earnistlye desired me to sett downe some covenantes amongst us for the better keepeinge of companie in this our viage the which thinge I did, gettinge the same translated into the Dannish toung, as youre Maiestie at youre best likeinge maye see moreover they settinge to there handes, sweareinge and protestinge to keepe the same covenantes so longe as possible they coulde, but how well and trewelye there othes and covenantes were kept and bformed shalbe further declared in place convenient

So, haveinge taken in oure water, we depted from Elsonvre the third daye at neight we haveinge not beene 24 howers at sea when y Captaine of y Lion with his steerman, Peter Kelson, complayned that they weere not suffitiently furnished of wood and water earnistly intreateinge both the Captaine and my selfe that wee would putt into some harbor in Norwaye where they meight supplye there wantes thewhich at there earnist desire

¹ The departure took place on the 2nd of May 1605.

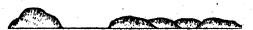
² Elsinore.

³ This term (which occurs frequently throughout Hall's narratives) is probably a literal translation of the Danish Styrmand, which is the ordinary equivalent of the English "mates". The grade of both Hall and Kieldsen in the Danish Navy was that of "Styrmand", and is so described in all contemporary Danish documents and accounts. Hall's position in the Danish Arctic Expeditions would, however, be better described in English as "pilot" (in Danish "Lods" or "Bekjendt Mand"). In any case, Hall would hardly have used the word "steeremen" in this place as the equivalent of the modern English steersmen".

we consented unto, although both the Captaine and my selfe had a better desire to preededed on our viage. So yt upon the 6 days at noone we came into ye harbor of Flocorie, where we supplied our wantes of wood and water till the 8 days in the afternoone at which tyme, haveinge a faire gayle of winde easterly we put to sea agayne dublinge the Nase of norwaye that neight, at which tyme I derected my course n.n.w. for the Iland of Faireile the which Iland we had seight of the 13 days, about 9 a clocke in the morninge, and also of the south head of shotland called swimborne head, the which Ilandes showeth, at the first seight thereof, in maner & forme followinge:—

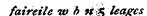


the forme of fayreile heareing wnw 8 leags of



the forme of the southermost part of shotland hearing nw b n 10 leges.









the south head of shotland nnw 6 legs of

The Ilande of Fayreile lieth in the Latitude of 59 degr 20 minuts as I proved by exacte observation it beareinge at that instant west somewhat northerlye about 4 leages

¹ Probably "to have proceeded" was intended.

² Flekkerö, a small island with a good harbour on the southern coast of Norway, close to the town of Christiansand. Danish ships bound for long voyages seem to have been in the habit of completing their stores at Flekkerö, as it is almost invariably reported that they stopped there.

³ Cape Lindesnæs.

Sumburgh Head.

of so, sayleinge a little to the northwardes of fayreile about a english leage from the n.w. pointe of the same, we come into a meightie currente which did sett n.n.west of So, leavinge fayreile I derected my course w. b. n. till I knewe my selfe shott to the westwardes of ye Lewes which lieth on the backe side of Scotland & also of the n. west coast of Ireland when I derected my course betweene ve west & s.w. b. s., vntill I brought my selfe into the Latitude of 58 degres 20 minuts at which tyme I went awaye w. b. n. and w.n.w. until ye 28 daye in the afternone when it began to blowe a storme the sea goinge verye hie the which storme continewed till ye 30 daye at noone, when it cleared up, but we had lost seight both of the Lyon and the Pinnis1; ffor in the foresayd storme it grewe so haysie and thicke that we lost one another so that it beinge cleare and seeinge noone of them about 2 a'clocke this same daye we had seight of lande which was pte of Groinelande it bearinge n.n.e. of vs 12 leages of beinge a verie hie ragged lande lyinge in the latitude of 59 degres 43 minuts which because it was the first pte of Groineland that we did see the Captaine with my selfe concluded to name it after youre Maiesties name, Cape Christianus2; the

A little farther down, the Report mentions their meeting the pinnace again; but, according to Leyell's Diary, the pinnace remained with the leading vessel (see note to the corresponding passage in the account reprinted from Purchas on p. 25).

This passage has sometimes been understood as if by the name Cape Christian, was meant for Cape Farewell. Luke Foxe, for instance, in 1635, declared (see his North-West Fox, p. 51, or Miller Christy's Voyages of Foxe and James, p. 86): "It can be no other but Cape Farewell." As, however, Hall does not say that the point in question was the southernmost extremity of Greenland, but only that it was the first land they saw, there is no occasion for that supposition, which would imply that Hall either failed to recognise the promontory seen and named by Davis, or intended to propose a new name for it. From Gatonbe's account of the voyage of 1612, we know that on that occasion Hall made out Cape Farewell;

which cape or headland, at the first seight, riseth in manner and forme followinge:—



The forme of Cape Christianus as it riseeth beareinge n e b n, 6 leages of

So, stadeneinge¹ all this afternoone into ye shore to se if it weere possible to sease upon² it we comeinge win 3 english leages of the same, founde all the cost so thicke besett with yee that it was not possible for anye shippe to come into the shore; yett, notwithstanding, we ventured so far within the same as we coulde convenientlye; for we weere, in a manner, compassed abowt with Ilandes of yee; so y¹ my Captaine, my selfe, with the Heigh botes man³ and an other of the companie, went overborde upon an Iland of yee to defende and beare it from the shippe. Thus being for a tyme troubled with the yee, we stood forth of the same to seaborde againe all this neight, west

but there is not the smallest indication of his having before described it under another name. On Hessel Gerritsz' map, and on the Stockholm chart, both headlands are plainly marked. On the former, Cape Farewell is so called, whilst Cape Christian is named "Hal's Cape", probably in honour of the discoverer. On the Stockholm chart the latter has the name of Cape Christian written against it, while the number "10" is placed against Cape Farewell, doubtless referring to a key. Most likely Hall's Cape Christian is the same which is still so-called, the westernmost promontory on Eggersö, in which case Hall's latitude, as given above (59° 43'), is only a few minutes too low; while the latitude given in the other narrative (59° 50'; see p. 25) is almost exactly correct.

¹ Query, "standeinge."

² To "seize upon" a coast is to reach or make it. The term is now obsolete.

³ This term is a translation of the Danish word *Höibaadsmand*, which signifies the same as the English "boatswain", whilst the Danish *Baadsmand* means a common sailor.

and w. b. s., till the morninge, when, by the providence of god, we weere cleared of ye same, at which tyme we had seight of the Lyon to seaborde of vs.1 They haveinge esspied us, bore with us. The Captaine, with Peter Kellson, his steereman, came aborde of vs, when they did both verie earnestlie entreat and humblelie desire me in youre maiesties behalfe to give them a sea charte, or derections whereby they meight know whether to goe if they shoulde lose vs, or at least wise retorne home agine, Peter Kellson both stayinge & sweareing that yf he did loose vs, he knewe not what waye to take; wherefore, consideringe that I had geven my faythfull oth and promise to youre Maiestie to be trewe both to you and youres in this action, I therefore bestowed a sea chart upon him,2 with derections, if he should lose us, to gett that pte of Groineland cleare without yee, prmiseing also unto him that, yf he would followe my derections, I would bringe them, by Gods helpe, saffe and sound to good harbors, without any pester of yee; he ptestinge agine vnto me by manye and severall othes that he would never leave me vntill by extranordinarie tempaste³ they weere driven fro vs by forse.4 So, standeinge allongst ye land to ye southward, so nye as we coulde, as ye yee woulde pmitte ffor all alongst this lande the yee lieth verie far of; ffor, assayeinge divers tymes to keepe by the vce, and, so to stande longst the lande to dubble the Gape Desola-

According to Leyell, it was somewhat later that the Lion rejoined the Admiral (see note to the corresponding passage in the text reprinted from Purchas on p. 27).

² The other narrative (see p. 27) says it was "a Sea Chart of those coasts", evidently meaning the coasts of Greenland. The question as to what chart this was, and whence Hall can have had it, has been discussed elsewhere (see the Introduction and Appendix A).

³ Query, "tempest."

¹ Concerning the whole of this incident, see the Introduction

tion, found oure selves often suddenlye compassed aboute with yee; but that, by the helpe of Allmeightie god, who delivered us, it was allmost impossible that we shoulde esscape forth of the same; and also, at that tyme, the weather was so thicke and haysie which doth in these ptes comonlie hange upon the yee that we could scarse se the great and hie Ilandes of yee till we weere allmost upon them; neyther coulde we se the shore at anye tyme after owre comeinge from Cape christianus by reason of these mistes. Therefore, I thought it conveniente to stand of a more southerlie course to seabord to duble the Cape; all the companie, my selfe and the Captaine onelie. excepted, being in dispaire. Peter Kelson also, with his companie, being verie desirous to turne home againe, sayeinge he thought it impossible to sease upon the lande for yee. But I, still encourageinge them to followe me, pmissinge, as before, to bringe them to a pte of the land without pester of yee. ffor, if my derections at the first had beene followed, we had dubled the cape at ye first, w'owt this pester of yce.8 So, standeinge to the southwardes, we mett with the pinnis, who had also beene

Davis, in 1585, named the southern portion of Greenland "the Land of Desolation", but there is, in his narratives, no record of his having bestowed the name Desolation upon any particular cape. If he had done so, it seems natural to suppose that he would have bestowed the name on the very prominent headland forming the southernmost point of his "Land of Desolation"; but it is generally held (and we believe with reason) that Davis himself bestowed upon that headland its present name of Cape Farewell (see p. 90, 11). The name "Cape Desolation", therefore, seems to be due to Hall, and it applies, as the text shows (see also p. 28), and as indicated on Hessel Gerritsz's Map of 1612, to another headland further to the north-west, probably the same which is still so-called, namely, the one on the Island of Nunarsuit, in the Julianehaab district.

^{*} Apparently "we" has been omitted.

This probably refers to his disagreements with Arnold, the navigating officer of the *Trast*, to which allusion is made in the account in Purchas (see p. 29).

amongst the yee to seeke vs. Thus, by the pvidence of God, beinge at this instant both the shippes and the pinnis together, I still encouraged them to peeed, promissinge them as before: so, standeinge to the southwardes, about the latitud of 59 degres 1, I then directed againe an northerlye course, betweene the n.w. and the n. b. e., we meetinge with some drifte Ilandes of yce, which was of no greate daunger; yett, notwithstandinge, they in the Lion beinge so timorous that they would soddenlye cast about and stand awaye, without any cause of daunger at all, till they had seene vs past the same, they cryeinge me still to alter my course and to give over the viage. But I, keepinge my course, and also respecteinge the good and pformeinge of the viage, encoraged them still to peede, promisseinge them still as before. contineweinge with vs unto the 11 daye, in the morninge, at which tyme the Captaine and my selfe,1 the neight before gone into the Pinnis, costinge longst a great banke of yee (which banke I knewe verie well to lye in the mid streeme betweene America and Groineland), willinge both them in the Trost and the Lyon to beare after vs, so neere as they coulde, and, yf they did se vs in anye apparrante dannger, to beare of againe to sea. the next daye, in the morneinge, not knoweinge anye cavse why, they (contrarie to there othes and pmisse) in the Lion shott of a peece of ordenaunce and so depted awaye fro vs. Butt, before they depted awaye, they spoke manye reprochfull wordes to them in the Trost, both of the Captaine & my selfe, willinge Arnald, the Levetennante, to leeve vs in the pinnis; the which he would not consent vnto, but sayd that he would followe vs accordinge to his oth and pmisse; so, they in the Lion beinge depted fro

The word "having" seems to have been omitted.
This incident is referred to in the Introduction.

vs, we stood all this fforenoone longst the yee till noone; at which tyme, the yee fallinge awaye, and also pfectelye knoweinge my selfe to be shott in the latud. of the cleare ptes of the coast of Groineland, I derected my course e. b. n. for the lande; the which, by gods helpe and assistance, we fell withall the next daye, in the morneinge Beinge a verye hie ragged land, haveinge the toppes of the hilles all covered with snowe, the forme and ffashon of which is heare sette downe to youre Maiesties vewe, betweene two Cape or hadlandes; betweene which 2 capes, we first fell withall, they lyinge one of the other s. b. w. and n. b. e., about 18 english leages. The southermost of which capes or Headlandes we named Queene anns Cape, after the name of youre Maiesties Queene¹;



The shape and fashion of the land as it rise to vs, Queene Anns Cape beareing south \(\frac{1}{2} \) point easterlye 9^2 leages and Queene Sophias Cape n.e. b. n. \(\frac{1}{2} \) a pointe northerlye 8 leg.

and the northermost of the said Headelandes we called Queene Sophias Cape, after the name of youre Maiesties mother.³ This daye, at noone, we came into a verye great

¹ Probably the headland rendered prominent by having upon it Mount Kingatsiak (1740 ft.), in lat. 66° 10' (see the Introduction and also Hall's General Map, IVa). Queen Anna, wife of King Christian IV of Denmark, was a daughter of Joachim Frederick, Elector of Brandenburg. She died in 1639.

² This figure appears in the MS. to have been corrected from 6 to 9, which is undoubtedly the more correct, as more nearly corresponding to Hall's estimate of the direct distance between the two "capes", viz., 18 leagues.

Probably the westernmost of the headlands at the foot of the Præstefjeld (the Mount Præste of the English Admiralty Charts) in

Baye, which we did suppose to be a great rever, and therefore named it youre Maiesties ford. At the mouth or entrye in of this Baye, on the north side, standeth a great mounte or hill, riseinge in forme of a suger loafe, the which mounte is the best marke for this place that maye be; the which I called Conningehams mounte, after the name of So, sayle⁸ this afternoone vp into the my Captaine. forde, about 10 english leagest from the sea, we allwayes soundeinge affore the shippe in the Pinnis, about 2 a'clocke, we came to an anker,5 when the Captaine and my selfe went a land, we ffalleinge downe on oure knees and thanked God for his goodnes; the which donne, the Captaine tooke possession of the same in youre Maiesties behalfe, takeinge with him both earth and stones6; ye which doone, we wente allongst the Rever, upon ye topps of hie mountaynes, haveinge the Bote still to rowe longst the shore with vs, the space of 3 english miles; when, lookeinge towardes the Bote from the hilles, we sawe 4 of them⁷ with there

lat. 66° 57' (see the Introduction and Hall's General Map, IVd). Queen Sophia, Consort of King Frederick II of Denmark, and mother of King Christian IV, was a daughter of Ulrick, Duke of Mecklenburg. She died in 1612.

¹ See Hall's general map (IVb) and the special map of King Christian's Fjord (I). The Greenlandish name of this fjord is Itivdlek (see the Introduction).

² Probably Mount Kakatsiak (3,250 ft.), in lat. 66° 38' (see the Introduction and Hall's Maps, I a). The name is not given on the English Admiralty Chart, but it is found on those of the Danish Admiralty (1866) and of Captain Jensen (Meddelelser om Grönland. vol. viii. plate ix).

³ Query, "sayleing."

In Hall's other account (see p. 34), the distance is stated to have been 6 or 7 leagues, which is more correct.

The anchorage is marked b on map I.

⁶ This ceremony was quite superfluous, as the Kings of Denmark claimed the land as an ancient possession.

The word "them" of course refers to the natives and indicates that, in the original draught, there was a reference to them just before,

housses. We soddenlye cominge downe from the hilles. towardes them, they presentlie fled from vs, one of them takeinge of his Bote. Oure people also in the bote haveinge esspied him, called to him; but he woulde not come neere them till the Captaine and I came to them; and, roweing towardes him, shewed him a knife and clappinge oure hand on oure brestes & holdeinge them vp to the Sonne, we called Yliovt. He, doing the same to vs againe, came at length to oure Bote and tooke the knife at the handes of the Captaine; and, haveinge gotten the same, rowed presentlye awaye from vs. The Captaine and my selfe, goinge a lande into the hovsses or rather tentes, which stood harde by the waters side, we founde them a kinde of tentes covered with seale skinnes; and we founde within them certaine seale fish boylinge over a little lampe in a kinde of pann, the bottom whereof was of stoone and the sides of whale finnes. The people beinge fled awaye, wee also found certaine of there cotes lined win with ffeath1 which we doe suppose to be for the winter, and also verie large fox skinnes. We, searchinge further, founde, in a vessell or panne, the head of a dogge, newlye boyled; also we found, lyinge a' dryinge round aboute the tentes, great aboundance of seale fish, with divers other fish, with 2 great botes made of seale skinnes, which had certaine thoustes2 or seates in them for 16 or 20 men, with certaine of there weapons; all which thinges, neyther the Captaine nor my selfe tooke anye thinge, but lefte in there tentes some trifles, and so came abord againe; when, aboute an hower after, there came divers of them to oure shippe in there botes, bartering some of there apparrill and weapons for old yron nayles; which haveinge donne, they depted away

1 Query, "feathers."

^{2 &}quot;Thoustes" is doubtless the same as "thoughts", an old word for "thwarts", the seats in a boat. It is found in Anglo-Saxon, and is still in use in Danish (Tofte).

for that neight, holdeing vp there handes to the Sonne and cryinge Yliovt. They still cominge vnto vs certaine tymes before I depted awaye with the Pinnis; in which tyme, the Captaine, haveinge gotten some of there seale fish, caved some of the botsmen to make oyle of the same; and, haveinge gotten a barrill full, leavinge the same that neight ashore some of the people upon pollicy the daye before, helpeinge oure folke not to be susspecteinge came this neight and lett the same out of the Barrill; yett, notwithstandeinge, the captaine vsed them kindenes,1 sheweinge no manner of discontente vnto them. But, the 152 daye of Jvne, I beinge readye to depte in the Pinnis for the discoverie of the coast and harbors, my captaine promiseinge me not to depte awaye homewardes till the end of 3 weekes or a month, he beinge verye desirous to have passed himselfe in the Pinnis with me, but for feare of the mytenye amongst the botesmen,3 which he did feare; which, indeed, woulde have lefte me in the Pinnis and retorned home yf he had not, as an honnest gentleman, prvented there determineations. Nowe, beinge readye to depte, ye winde at that tyme beinge not good for vs to goe downe ye ford, but for the Trost to goe further vp to searche ye forde, they depted fro vs, leaveinge vs in the Pinnis to pforme oure discoverye; when, beinge gone from vs, the Barbarvs people, seinge vs left alone, began, the same neight, for to slinge stones at us from the mountaynes,*

¹ Query, "with kindness."

² From the other accounts (see p. 38), this appears to be a clerical error for 16th.

³ This is a literal translation of the Danish word Baadsmand, meaning ordinary seamen (see p. 5, note), and is not the equivalent of the modern English "boatsmen".

From the other accounts, it appears that this attack was made on the 18th, two days after the departure of the larger vessel, the natives having already on the 17th shown a hostile attitude, and it was not till then that the explorers used their firearms.

we shoteinge oure ordenance at them, but it p'vayled nothinge; for, when they sawe fier geven, they would ducke downe vnder the clippes till the peeces weere of, and then begin to sling stones againe. The next daye, also,2 ye wind beinge contrarie, we rod still. The people in the afternoone came to vs to the number of 40 or 50 psons; who, all this afternoone, did so fearselye assayle vs with stones from the hilles that there was no man able to stand on the hatches untill such tyme as I comaunded to lase sayles and bonnittes3 a great height rounde about yo shippe, which did defende vs from there stones, that they coulde in no wise doe vs herte, which they pceiveing haveinge continved with vs 6 howers, depted awaye.4 The next daye, beinge still weather, I cavsed the companie to lose and to rowe downe the ford with the tyd of ebb. The tyd of flood beinge comd, we came to an anker in a verie⁵ haven on the south sid of the entrye into the forde; the which place, for the comodiousnes thereof, I called Denmarkes Haven⁶; the which haven, with other harbors which I have discovered, is heareafter sett downe to your Maiesties vewe, as I did exactelye discribe ye same. The 20 daye, in the morninge, the weather beinge verie fayre and still, I cavssed to weye anker and to rowe forth to sea warde. when, beinge forth of the forde, amongst the Ilandes, there came 100 and od of the people in there botes to vs. I, seeinge

¹ "Clippes" is, no doubt, the Danish word *Klippe*, meaning a rock, which Hall has here adopted.

² The words "the next daye also" refer to the 18th of June.

³ Bonnets were supplementary sails attached to the courses or lower sails. By lacing these together, a close screen could easily be arranged.

^{*} This probably occurred in what Hall called, in consequence, "Slinge Road". Although the name does not appear in either of his narratives of the voyage, it is found on his Map of King Christian's Fjord (1 c).

⁶ Query, "good" or "convenient" is omitted.

⁶ Marked d on Hall's special map of King Christian's Fjord (I).

them, thought it best at that instante to offer no inivrye to them; yett, notwithstandeinge, I cavssed everie man to be in readines, if occassion shoulde be offered. In the meanetyme, I bartered with them for such comodities as I could gett, they beinge verie desirous to have vs to anker againe in some of the Ilandes, the sendeinge certaine men with dartes, and bowes and arrowes, and also to gather stonnes, to some of the Ilandes to which they did suppose we would But I, pceiveinge there pollisie, kept me of fro the shore without davnger of ther stones, darts, and arrowes, and so stood to scawardes. They, peciveinge that I was not determined to anker, threwe certaine shelles into oure cok bote, makeinge sines for some of oure men to fetch the same. The most of them beinge gon from vs, my boye,2 goinge into the Bote at the intreatie of the shipp,3 was shott throwe both the Buttockes with a darte; at which tyme, they rowed all awaye, standeinge vpon the Ilandes, where they did suppose we woulde have comde, aboue 200 psones. But, god sendeinge vs a gayle forth of the ford at southeast, we gott this eveninge to sea, we standeinge to the norwardes, discoveringe the coste and harbors allongst vnto ye latitud of 69 degres, which Cape we called Christin friesses Cape, after the name of the Chanceler.4 I allso gave name to certaine other fordes,

² William Huntriss by name (see Introduction).

¹ Query, a clerical error for "they".

³ Query, a clerical error for "shipper" (see p. 29, n.). See Leyell's account of the occurrence (p. 43, n.).

⁴ Hall did not really proceed as far north as lat. 69°, though he may have been able to see that far. The cape he named "Christin Friesse's Cape" was probably the western extremity of the Island of Sarkandlek, in 68° 35′ (see Map IV a). Christian Friis of Borreby was born in 1556. He was a man of considerable ability, and is stated to have visited England several times, first as a young man for purposes of educational travel, and afterwards on public business. He became Chancellor of Denmark in 1596, and died in 1616.

soundes, and Ilandes all allongst this coast, so far as we went, it beinge one of the best coastes for harboringe of shippes in the whole worlde; beinge, so far as I did discover, voide of all yce; all which cost & harbors, with other matters, I have demonstrated to youre Maiesties vewe.1 When I, haveinge discovered the same, I retorned backe againe to the Trost, cominge to them vpon the 10 of Julye, where I found both the Captaine & the rest of the companie in pfitt health, thankes be to god. But, after oure depting from them, the companie would needes have been gone home, and left us in the Pinnis, yf the captaine as an honest and faythfull Gentleman, both to youre Maiestie and also to me had not withstood them and stayed for me. When beinge com to them, I founde the Captaine to have taken these 3 psons which nowe is brought to youre Heighnes.2 So, the next daye, beinge y 11 of Julye, we tooke oure waye homewardes, thinkeinge to keepe the cost alongst to the southwardes; but, cominge to the southwardes of Queene Annes Cape, we found great bankes of yee, wheby3 we weere forssed to stand to seabord; where divers tymes we mett with invmerable skylles Beinge cleare of the yee, we derected oure of whales. course homewardes loseinge oure Pinnis in a thicke, homewardes, not seeinge her again vnto oure cominge home, haveinge all the wave from Groineland to the Iles of Orkeney such continval fogges or mistes that it is wonderfull to reporte; in which fogges, vpon the 23 of Jvlye, we left the pinis; and, vpon the first of Avgust, we had

¹ For an account of this part of the voyage, based on Leyell's Diary, and for a notice of the maps illustrating it, see the Introduction; where, also, suggestions have been made which may explain why Hall, in both his narratives, describes his excursion northwards with such remarkable brevity.

² A fourth was killed in taking them (see p. 48).

³ A clerical error for "whereby".

seight of the Ilandes of Orkney; and, upon the 5 daye we had seight of the Nase of norwaye; when, cominge into ye sounde, we arived, by godes mertifull pvidence, at Elsonvre upon the 10, in the morninge; and, ankeringe, we went on land. And, heareinge of youre heighnes beinge at Copemanhaven, we streight weyed and sett sayle for Copemanhaven, whether we came the same daye, in the after noone. for which good and pperous viage, all glorie be to god, both nowe and evermore.

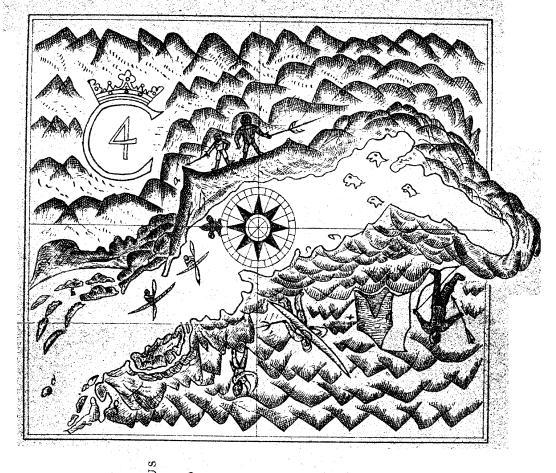
Yovre maiesties servant, to his power James Hall pilote.

THE

DEMONSTRATION

OF THE

FORDES, RIVERS, AND THE COASTE.

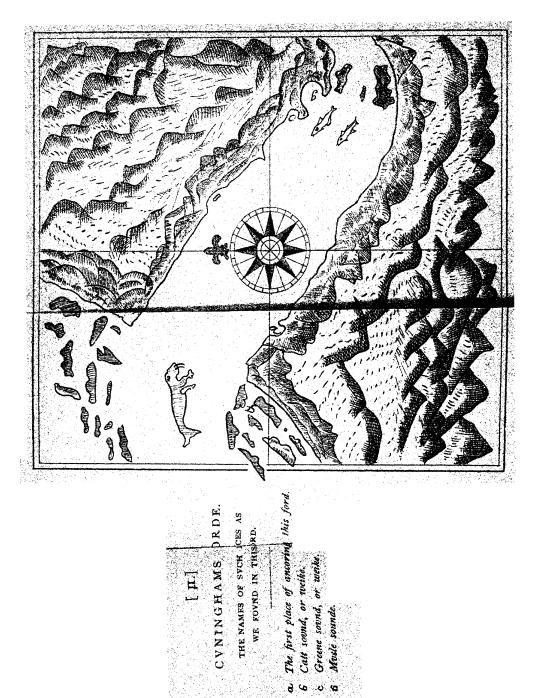


[**i**]

THE KINGE CHRISTIANUS HIS FORDE.

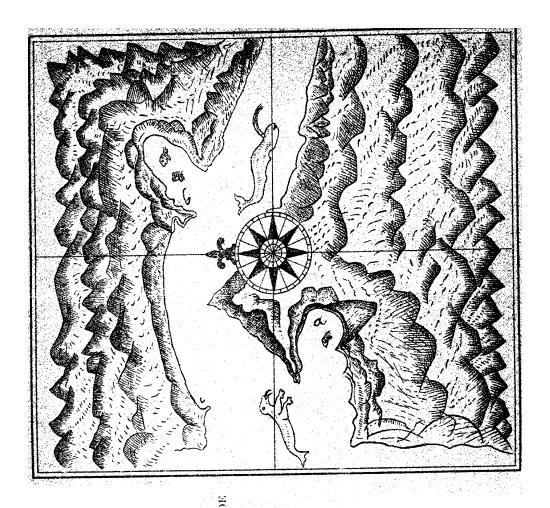
NAMES OF ROLIESTES, HAVENS, AND SOVNDES WITHIN THIS FORD.

- & Coninghams mounte.
- 6 The place of oure first ancoring.
 - c Singe Road.
- b Denmarks haven.
 - d Trost Itand. f Trost haven.



CVNINGHAMS PRDE.

a. The first place of anoring this ford.
6. Cast sound, or weiths.
5. Greine sound, or weith.
6. Musle, sounds.

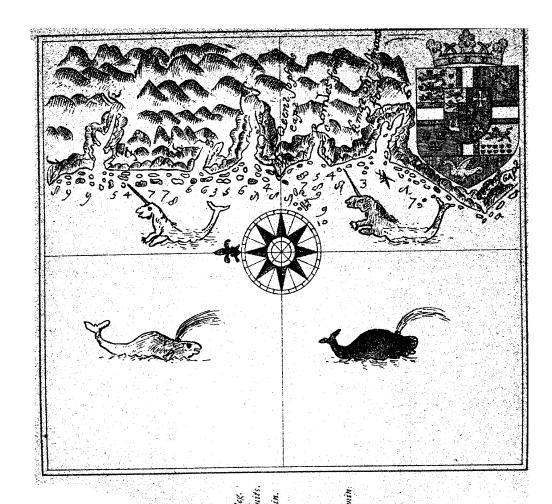


[ML] BRADE: RANSONS, WORDE

THE NAMES OF TAKES WITHIN EQUS FONDE.

C. Shoride with

C. Cliffe road.



. '**:** THE COAST OF GROINBLAND.
WI'H THE LATITUDES OF THE
HAVENS AND HARRORS

AS I FOUNDE THEM.

Queene anns Cape, in the latitude of 66 deg.

King Christianus forde, in 66 deg. 25 minits.

Henririk Romles ford, in 66 degres 35 min.

Queene Sophus Cape, in 67 48: 45 min.

S. Knights Ilandes, in 67 deg. 58 minits.

F. Coningham's ford, in 67 degr. 25 minits

Prince Christianus Forde, in 65 deg. 30 min.

E. Arnolds Soond, in 67 degres 48, minits. F. Bavhovse sound, 67 degres 56 minutes.

. Brade Ransons ford, in 58 4



Another Account of the Danish Expedition to Greenland, under the Command of Captain John Cunningham, in 1605.

By JAMES HALL, CHIEF PILOT;
as abbreviated by the Rev. Samuel
Purchas.

From Purchas His Pilgrimes (London, 1625), vol. iii, pp. 814-821.1]



N the name of God, Amen. We set sayle from *Copeman-hauen*, in *Denmarke*, the second day of May, in the yeare of our redemption 1605, with two Shippes and a Pinnace: The Admirall,² called the *Frost*,³ a

shippe of the burthen of thirty or fortie lasts,⁴ wherein was Captaine and chiefe commander of the whole Fleet, Captaine *Iohn Cunningham*, a *Scottish* Gentleman, seruant vnto the Kings Maiestie of *Denmarke*,⁵ myselfe being principall Pilot: The *Lyon*, Vice-admirall, being

¹ Those foot- and side-notes in Purchas which are only intended or reference have been omitted.

When reading the following narratives, it should be borne in mind that, at the time in question, the individual in command of a fleet was known as the "General", while the particular ship in which he sailed was known as the "Admiral".

³ Misprint for Trost.

⁴ A Danish "last" equalled two tons. See p. 1.

about the foresaid burthen, wherein was Captaine, one Godscaio Lindenose, a Danish Gentleman, and Steereman of the same, one Peter Kilson, of Copeman-hauen. The Pinnace, a Barke of the burthen of twelue Lasts, or thereabouts, wherein was Steereman, or Commander, one Iohn Knight, my Countrieman. So, setting sayle from Copeman-hauen, with a faire gale of winde Easterly, wee came vnto Elsonure, where we anchored, to take in our water.

The third day, we tooke in our water; at which time, the Captaines, my selfe, with the Lieutenants and the other Steeremen, did thinke it conuenient to set downe certaine Articles for the better keeping of company one with another; to which Articles or couenants were all seuerally sworne, setting thereunto our hands.

The sixt, we came to *Flecorie*, into which harbour, by Gods helpe, we came at two a clocke in the afternoone. The seuenth day, we supplied our wantes of wood and water. The eight day, about two a clocke in the afternoone, we set sayle forth of the harbour of *Flecorie*. About six a clock, it fell calme till about eight; about which time, the *Nase* of *Norway* (by the *Danish* men called *Lyndis-nose*) bare next hand North-west of vs, sixe

That is, about the burden of the Trost.

² Godske Lindenow (see the Introduction). His vessel was called Löven (or den Röde Löve) in Danish.

³ His name is properly spelled Kieldson (see the Introduction).

⁴ The name of this vessel was Katten, but she is often referred to under the appellation of "Pinken": that is, "the pinnace", in English.

⁵ Purchas here adds, in a note, the words: "Of whom after", meaning that he has inserted later on in his work an account of Knight's voyage in search of a North-west Passage made in the following year (1606). Upon this voyage, Knight lost his life, and in consequence no fresh discoveries were made. The best account of it is in Mr. Clements R. Maikham's work on the *Voyages of Lancaster and Knight* (Hakluyt Society, 1876).

leagues off; at which time, I directed my course West North-west, finding the compasse varied 7 degrees 10 minutes to the Eastwards of the true North.¹

The thirteenth, we had sight of the Iland of Faire Ile, and also of the South-head of Shotland, called Swimborne head, which are high Lands. At noone, the Iland of Faire Ile bearing West halfe a point Northerly, foure leagues off, I made observation, and found vs in the latitude of 59 degrees 20 minutes. This night, about seven a clocke, wee came about an English league to the Northwards of the North-west end of Faire Ile. Wee met with a great race of a tyde, as though it had beene the race of Portland, it setting North North-west. Being out of the said race, I directed my course West and by North, having the winde North-east and by North. This evening

For the sake of completeness, we may here insert the entries in Leyell's Diary which fill up the gaps in Hall's account:—

[&]quot;On the 2nd of May, in the year 1605, sailed three of H.M. Ships from Copenhagen to search for Greenland. Of these *Troust* was Admiral, and him followed *thenn Röde Löffue* and *Katten*; and *Katten* carried with her this true report.

[&]quot;On the same day, they came to Kromborg and sailed from there in the evening, at 10 o'clock, with a S.W. wind; and their course was N.W. until the 4th.

[&]quot;4. In the evening the wind became westerly; then they tacked in the night between the Scaw and Marstrand.

[&]quot;5. In the morning, at 4 o'clock, the wind became southerly, their course W. to S.

[&]quot;6. The wind E.N.E., their course S., with much fog and rain; and they came that day to Flekkerö and remained there still until the 8th.

[&]quot;8. In the afternoon, at 4 o'clock, they set sail with an E.N.E. wind and came under the Ness in the evening.

[&]quot;9. The wind was a light N.E. breeze and their course N.W. to W.

[&]quot; 10. The wind E. by N., their course W. by N.

[&]quot;11. The wind northerly, their course W. by N.

[&]quot;12. Light wind in the forenoon, and they came under Shetland, but in the afternoon the wind was W., their course N. by W."

(Faire Ile bearing East South-east, foure leagues; Swimborne head, North-east and by North, eight leagues; the Iland of Foole, North-east and by East, seuch leagues²), I found, by exact observation, the compasse to be varied to the East-ward of the true North 60 degrees 10 minutes.³

The fourteenth, in the morning, the winde came to the East South-east, wee steering West and by North away. This morning, the Island of *Faire Ile* did shew in my sight to bee about ten leagues off; at which time, we did descrie two of the Westermost Islands of *Orkney*, which did beare South-west and by South.⁴

The eighteenth, the winde at North-west and by West, wee laid it away South-west and by West, and sometimes South-west. This day at noone, wee were in the Latitude of 58 degrees 40 minutes. The nineteenth day, the winde at South-west and South-west and by West, wee lying as the night before, being at noone in the Latitude of 59 degrees and a halfe. The foure and twentieth day, the winde at North-east and by East, we steering still with a fresh gale West South-west.⁵ This euening, we looked to

¹ Foula.

² This combination of bearings being impossible, it seems that those of Foula and Sumburgh Head have been interchanged. Leyell's entry for the 13th is as follows:—

[&]quot;13. The wind N.W., their course N.N.E. four glasses; after that their course W. by S., and they passed Ferö in the evening at 6 o'clock: afterwards the wind became N.E., their course W. by S."

³ This is probably a misprint. The variation in the vicinity at the time would have been much nearer 6° 10′ E.

⁴ Leyell's entry is:—"14. As before until the evening; at four o'clock they came under Orkney, 3 miles from land." The miles are no doubt ancient Danish sea-miles, nearly equal to four nautical miles.

The preceding part of Hall's account from the 18th, as here rendered, is unintelligible. The words referring to the 19th, "wee lying as the night before", can be understood only as meaning the last-mentioned course—S.W. by W. and S.W.; and the expression referring to the 24th, "we steering still . . . W.S.W.", taken to-

same to be placed in a wrong Latitude in the Marine Charts.¹ The sixe and twentieth at noone, wee were in the latitude of 57 degrees 45 minutes.² The thirtieth day, in

gether with the preceeding statements, clearly imply that a south-westerly course had been steered with little variation from the 18th to the 24th. But it is evident that, in that case, they would have got much too far South; nor could they, in that case, have been in lat. 58° 48' on the 18th and in 59° 30' on the 19th. The fact is no doubt that Purchas, in his process of abbreviation, has left out as uninteresting some of Hall's statements about the course, not observing that, in so doing, he rendered the remaining indications meaningless. Leyell's Diary fills up the gap and explains the apparent contradictions. His entries are:—

- "15. The wind N.W. before noon, their course W. by N., but after noon the wind was W.S.W., their course W.N.W.
- "16. The wind W. by N., and they tacked before noon, and in the afternoon, with a N.W. wind, their course was W. by S.
- "17. Likewise in the forenoon; after noon a gale of W., their course S.
 - "18. The wind W.S.W., their course N. by E.
 - "19. Whitsunday, the wind S.W., their course N.W. by W.
 - " 20-21. The same.
 - "22-24. A stiff N.E. wind, their course W.S.W."

From this it appears that on the 18th they laid away to the North, and that was the course of "the night before", which was continued a part of the 19th, and by which they came back from 58° 40′ to 59° 30′. This was continued the two following days; and, though on the 24th they were "still" steering W.S.W., it was only since the 22nd that they had done so.

- Busse Island, it will be remembered, was supposed to have been discovered on Frobisher's third voyage in 1578 in 57° 30′; from which it may be concluded that the expedition on this day was not far from that latitude. Bielke says that they went—that is, of course, imagined that they went—south of Busse and Frisland. On the Island of Busse, see Appendix B.
- ² This does not quite agree with Hall's statement in the Report to the King (see p. 4) that he steered between W. and S.W. by S. until he found himself in latitude 58° 20′, when he went away W. by N. and W.N.W., implying that he did not come farther S. than 58° 20′. But it must be remembered that, in the Report, Hall would naturally pay less attention to that kind of detail. Hall does not

the morning, betweene seuen and eight, the weather began to cleere, and the Sea and winde to waxe lesse. Wee, looking for the Lion and the Pinnasse, could have no sight of them, we supposing them to bee asterne off vs, we standing still vnder our courses. This day, the winde came to the North-east and by East, being very cold weather, we lying North North-west away. Making my observation at noone, I found vs in the latitude of 56 degrees 15 minutes, our way North North-west fortie leagues. This afternoon, between one and two a clock, we descried Land, it bearing North North-east off vs about ten leagues off North-east and by North off vs about ten leagues³; it being a very high ragged land, lying in the latitude of 59 degrees 50 minutes, lying alongst South-east and by South, and North-west and by North.

This Head-land wee named after the Kings Maiesties

state when he changed his course for a more northerly one, but Leyell's Diary supplies the defect. His entries for these days are :--

[&]quot;25. The wind N.E., their course W.S.W. until noon, but after noon the course was W.

[&]quot;26-27. A stiff N.E. and E.N.E. wind; their course W."

¹ Here, too, it is evident that something has been omitted, as there is no mention in the preceeding paragraph of any tempestuous weather. The Report to the King, however, states (see p. 4) that they were assailed by a violent gale on the afternoon of the 28th. This is also mentioned by Leyell, and all three authorities state that the ships were separated; but, whilst Hall, both here and in his "Report", says that both the other vessels were separated from the Admiral, Leyell implies that only *Löven* got away from the others. His entries for these days are as follows:—

[&]quot;28. The wind N.E., their course W.N.W.; towards evening a storm came upon them.

[&]quot;29-31. As before, so that they could not carry any sail, and towards evening their course was N.W.; at that time then Röde Löffue was separated from the Admiral and Katten, in a great fog."

² A misprint for "59 degrees 15 minutes", as the matter following shows.

³ These words are repeated in Purchas, apparently through a printer's error.

of Denmarke, because it was the first part of Groenland which we did see.1 This afternoone, about one a clock, bearing in for the shoare, we saw an Iland of Ice, which bore West South-west of vs, three leagues off; so, having the wind at East South-east, we bore in for the shoare, where we found so much Ice that it was impossible either for vs or any other ship to come into the shoare without great danger. Yet wee put our selues into the Ice as wee thought convenient, being incumbred and compassed about with the same in such sort as the Captaine, my selfe, the Boatswaine, with another of our companie, were forced to goe ouerboard vpon an Iland of Ice, to defend it from the ship; at which time, I thought it convenient to stand off into the Sea againe, and so, being cleere of the Ice, to double Cape Desolation,2 to the North-westwards of which I doubted not but to find a cleer coast; so, standing away all this night West South-west, to cleere vs of the Ice, which lay farre from the shoare, being very thicke towards the Land with great Ilands of Ice that it is wonderfull. This euening, the Cape Christian bearing North-east and by East, fiue leagues [off], I found the Compasse varied 12 degrees 15 minutes to the North-westwards. Moreouer, standing to Seaward from the foresaid Cape, we came in blacke water, as thicke as though it had beene puddle water, we sayling in the same for the space of three houres.8 *

The one and thirtieth, in the morning, faire weather, with the winde somewhat variable, wee steering away North-west and by West, betweene foure and five in the

With regard to this landfall, see the "Report" (p. 4, note) and our Introduction. Purchas, in a side-note, adds: "Cape Christian", probably finding that the abbreviator had omitted the name and thinking that, without the explanatory note, confusion might arise, as the Cape is mentioned by name later on.

2 See p. 7, note.

³ This incident seems to have impressed them very much. Bielke also mentions it. It is frequently noted by the early arctic explorers,

morning, we had sight of the Lion againe, but not of the Pinnasse.¹ They being a sea-boord off and having espied vs, they stood with vs, at which time the Captaine, Lieutenant, and Steereman came aboord vs, earnestly intreating mee to bestow a Sea Chart of the Steerman, and to give him directions if by tempestuous weather they should lose vs, they protesting and swearing that they would neuer leaue vs as long as winde and weather would permit them to keepe companie with vs. By whose speeches I being perswaded, did giue them a Sea Chart for those Coasts, telling them that, if they would follow me, that by God's assistance, I would bring them to a part of the Land void without pester of Ice, and also harbour the ships in good Harbour, by God's helpe; they swearing and protesting that they would follow mee so long as possibly they could: with which oathes and faire speeches I rested satisfied, thinking they had thought as they had sworne, but it fell out otherwise.2 So, having made an end with vs, about noone,

¹ In the present account, Hall does not mention the return of the pinnace, but he does so in the "Report" (see p. 7), though without indication of date. In the face of Hall's explicit statement, it is remarkable that Leyell, as already mentioned, expressly says that only Löven was separated from the others, which implies that the pinnace was with the Admiral when Löven returned. This event, according to his Diary, cannot have been earlier than the 1st of June; his entry for the first days of June being simply: "1-2. A light S.W., their course N. by W.; then they got sight of two large icebergs, and came into much ice; at that time Löffuen came again to them." Considering that Levell does not mention the sight of land, nor the conference on board the Trost, the difficulty may perhaps be solved by supposing that the small vessel was so far separated from the Admiral as not to have been visible from the latter, while those on board the pinnace never quite lost sight of the Trost; and, as it appears that Löven got separated again on the 31st, through fog, the pinnace may have come near enough for Leyell to see her rejoining the Admiral, and he may have thought that she had been away all the time. In itself, of course, this is of no consequence, except as bearing on the respective accuracies of the two accounts.

² For observations on this incident, see the Introduction.

they went aboord againe, wee being this day in the latitude of 59 degrees 45 minutes, having stood all the night before, and this forenoone also, so nigh the shoare as wee could for Ice, the Cape Christian South South-east and North North-west; and from the Cape to Cape Desolation the Land lyeth East and by South, and West and by North, about fiftie leagues. This day, betweene one and two a clocke, the Vice-admiral's Boat being newly gone aboord, it fell very hasie and thicke, so that wee could not see one another by reason of the fog; therefore our Captaine caused to shoote off certaine Muskets, with a great peece of Ordnance, to the intent the Lion might heare vs; which1 heard of them, they presently stood with vs; at which time the fogge began somewhat to cleere, we having sight one of another, and so stood alongst the shoare, as nigh as we could for Ice.

The first of June, wee had a fresh gale of winde at Southwest, wee steering North-east and by North into the shoare; about three in the morning, there fell a mightie fogge, so that we were forced to lye by the lee for the *Lion*, playing vpon our Drum, to the intent for them to heare vs and to keepe companie with vs, they answering vs againe with the shooting of a Musket; wee, trimming our sailes, did the like to them, and so stood away North-east and by East, larboord tackt aboord halfe a glasse, when we were hard incumbred amongst mightie Ilands of Ice, being very high like huge Mountaines; so I caused to cast about and stand to the Westwards North-west and by West. About twelve of the clocke this night, it being still calme, wee found

¹ Query, "being" omitted.

² Probably "aboord" is a misprint, and the passage really means (as on p. 51) that they sailed on "larboard tacked" about half a glass. At the same time, according to Smyth (Sailor's Word-Book, p. 13), "to haul the tacks aboard" means "setting the courses", in which sense we find it on pp. 33 and 58.

ourselues suddenly compast round about with great Ilands of Ice, which made such a hideous noyse as was most wonderfull, so that by no meanes wee could double the same to the Westward; wherefore wee were forced to stand it away to the Southwards, South South-west, stemming the Current; for, by the same Current, wee were violently brought into this Ice; so, being incumbred and much to doe to keepe cleere of the mightie Ilands of Ice, there being (as both I and others did plainly see) vpon one of them a huge rocke stone, of the weight of three hundred pounds or thereabouts, as wee did suppose. Thus, being troubled in the Ice for the space of two or three houres, it pleased God that we got thorow the same.

The second day, in the morning, about three a clocke, I came forth of my Cabin, where I found that the Shipper,1 whose name was Arnold, had altered my course which I had set, going, contrarie to my directions, North North-west away; whereupon hee and I grew to some speeches, both for at this time and other times hee had done the like. The Captaine, likewise, seeing his bad dealing with we2 did likewise roundly speake his minde to him; for at this instant wee were nigh vnto a great banke of Ice, which wee might have doubled if my corrse had not beene altered; so that we were forced to cast about to the Southwards, - South and by East, and South South-east, with the winde at South-west and by South or South-west, till ten a clocke, when we stood againe to the Westwards, lying West North-west and North-west and by West, being at noone in the latitude of 60 degrees 18 minutes, Cape

The word "Shipper" (which occurs several times hereafter) seems to have been in use in English at the time as a name for the "master" of a ship, as distinguished from the captain. The particular person here alluded to (Arnold by name) was the navigating officer of the Trost. He was, in Danish, according to the usage of the time, styled Skipper.

2 A misprint for "me".

Desolation is, I did suppose,1 bearing North and by West three or foure leagues off, the weather being so thicke and hasie that wee could neuer see the Land.

The fourth day, betweene one and two a clocke in the morning, it began to blow a fresh gale Easterly, we steering away North and North and by West, we being at noone in the latitude of 59 degrees 50 minutes,2 having made a West and by North way foure and twentie leagues. This euening, about seuen a clocke, we had very thicke water, and continued so about halfe an houre. About nine a clocke, we did see a very high Iland of Ice to the windward of vs; and, about halfe an houre after, with some drift Ice, they in the Lion, thorow the fearefulnesse of their Commanders, presently cast about, standing away larboord tackt, till they did perceiue that I stood still away as I did before, without impediment of the Ice, they cast about againe and followed vs.

The fift, in the morning, being very faire weather, with the winde at East South-east, our course North Northwest, some of our people supposed they had seene the Land. Our Captaine and I went aboord the Pinnasse, when, after an houre of our being there, we did see the supposed Land to be an hasie fogge, which came on vs so fast that wee could scarce see one another. But, the Lion being very nigh vnto vs, and it being very calme, wee laid the Pinnasse aboord of her, and so the Captaine and I went aboord of them.

The ninth day, about foure a clocke, it began to blow an easie gale at South-east and by South, I directing my

¹ Probably this should read: "Cape Desolation, as I did suppose, bearing north," etc.

² This is probably an error. If correct, they must have been sailing south, of which, however, nothing is said, but Purchas has omitted the events of June 3rd. According to Levell (see p. 31, n.), their course on that day was West.

course still North North-west, when some of our people would not be perswaded but they did see Land; and therefore I stood in North and by East and North-Northeast, till about three a clocke in the afternoone, when wee met with a huge and high Iland of Ice, wee steering hard to board the same, and being shot a little to Northwards of it, there fell from the top thereof some quantitie of Ice, which, in the fall, did make such a noyse as though it had beene the report of fiue Cannons. This euening wee came amongst much drift Ice, being both windwards and to leewards of vs; yet, by God's helpe, we got very well through the same; when, being cleere, I directed my course againe North-North-west.²

The tenth day, the winde at South-west and by West, I steering still North-west and by North. This forenoone also wee met with great Ilands of Ice, it being very hasie and thicke weather, the which did driue them in the *Lion* into great feare; and, calling to vs very fearfully, perswaded me to alter my course and to returne homeward, saying that it was impossible for vs by any working and course keeping to sease upon the Land; which did driue

¹ Query, "to" omitted.

² Leyell's Diary has the following in continuation of the last-cited entry (see p. 27, n.):—

[&]quot;3. A light N.W. wind, their course W.

[&]quot;4. A stiff ES.E. wind, their course N. by W.; and that night they came into much ice.

[&]quot;5 The wind easterly, their course N. by W.; a large dark bank appears, which they thought to be the land, and at once the Captain of the Admiral and his first mate wanted to be landed in the pinnace.

[&]quot;6. A stiff W.S.W. wind, their course N. by W.

[&]quot;7. The wind N.W. in the forenoon, their course N. by E., and afternoon the wind came northerly; their course was W.N.W., and they were in much ice.

[&]quot;8. A light northerly wind, their course W.N.W., and they saw much ice.

[&]quot;9. The wind S.S.W., their course N. by W., and they saw much ice.

all our companie into such a feare that they were determined, whether I would or not, to have returned home, had not the Captaine, as an honest and resolute Gentleman, stood by mee, protesting to stand by me so long as his blood was warme, for the good of the King's Maiestie, who had set vs forth, and also to the performing of the Voyage. Which resolution of his did mitigate the stubbornenesse of the people; yet nothing would perswade those fearfull persons in the Lion, especially the Steerman, who had rather, long before this time, have returned home then to haue proceeded on the action, as before the said Steerman had done when he was imployed, eight yeeres before, in the said action or discoverie.1 Therefore our Captaine and my selfe, seeing their backwardnesse, now, as before we had done, went our selues the same euening into the Pinnasse, hauing a mightie banke of Ice of our larboord side, and spake to them very friendly, giuing order, both to our owne ship and to them, that they should keep a Sea-boord of vs (for I did suppose this banke of Ice to lye in the narrowest of the Streight, betweene America and Groenland, as, indeed, by experience, I found the same to Therefore I determined to coast the Ice alongst till I found it to bee driven and fall away by reason of the swift current that setteth very forcibly through the said Strait, and then, by the grace of God, to set ouer for a cleere part of the coast of Groenland; so, all this night, we coasted the Ice, as close aboord as we could, East-Northeast and North-east and by East, till about midnight, when we found the said banke to fall away.

The eleuenth day, being cleere of the Ice, I stood away North-North-east till sixe a clocke, when we met with another great banke of Ice; at which time, the Commanders of the *Lion* (being now againe very fearfull, as before) came

¹ For remarks on this passage, see the Introduction.

vp to our ship, perswading the Shipper and Companie to leave vs, aud to stand to Seaboord with them. But the Shipper, who was also Lieftenant of the ship, being more honestly minded, said that he would follow vs so long as he could; with which answere they departed, vsing many spitefull wordes both of the Captaine and mee, saying we were determined to betray the King's ships; at which time they shot off a peece of Ordnance and so stood away from I, seeing their peruerse dealing, let them goe, wee coasting alongst the Ice North-North-east, with a fresh gale, it being extreme cold, with snow and hayse, the Sea also going very high by reason of a mightie current, the which I found to set very forceably through this Strait, which, being nigh vnto America side, setteth to the Northwards, and on the other side to the contrarie, as by proofe I found. So, coasting alongst this mayne banke of Ice, which seemed as it had beene a firme Continent, till about eleuen a clocke, when we espyed the Ice to stretch to windward on our weather bow, wee, setting our starboord takes aboord,3 stood away East and by South, with the winde at South and by East, till wee had doubled a Seaboord the Ice; at which time, I directed my course directly ouer for the cleere coast of Groineland, East and by North, which course I directed all the Frost to goe,4 wee standing away our course all this night, it being very much snow and sleete.5

¹ The "Shipper" was Arnold, with whom Hall had formerly quarrelled (see p. 29).

For observations on this incident, and for a brief account of the subsequent homeward voyage of Löven, we refer to our Introduction.

Thus in Purchas.

<sup>See p. 28, note.
Leyell's entries for these days are quite short:—</sup>

[&]quot;10. The wind S., their course as before, amongst much ice.

[&]quot;11. The wind S., their course E. with much ice and fog; at six o'clock in the morning then Röde Löffue changed her course, left the others, and fired off a piece."

The twelfth day, in the morning, about foure a clocke, we espyed the Land of Groenland, being a very high ragged Land, the tops of the Mountaines being all couered with snow; yet wee found all this coast vtterly without Ice. Wee, standing into the Land, espyed a certaine Mount aboue all the rest, which Mount is the best marke on all this Coast, the which I named Mount Cunningham, after the name of my Captaine. We comming into the shoare betweene two Capes or Head-lands, the Land lying betweene them North and by East and South and by West, the Southmost of which Forelands I named Queene Anne's Cape, after the name of the Queenes Maiestie of Denmarke, and the Northermost of the two I called Queene Sophia's Cape, after the name of the Queene Mother.

So, standing into the Land, we came amongst certaine Ilands, where, sayling in still amongst the same, vnto the Southermost foot of the foresaid Mount, wee came into a goodly Bay, which we did suppose to be a Riuer, being on both sides of the same very high and steepe Mountaines. Wee named the same King Christianus Foord, after the name of the King's Maiestie of Denmarke. So, sayling vp this Bay, which wee supposed to bee a Riuer, the space of sixe or seuen English leagues, finding in all that space no anchoring, being maruellous deepe water, till at the length we had sayled vp the Bay the foresaid distance, at length I brought the Ship and Pinnasse to an anchor in sixteene fathom, shelly ground; at which time, our Captaine and I went aland, giving thankes vnto God for his vnspeakable benefits, who had thus dealt with vs as to bring vs to this

¹ Probably Mount Kakatsiak (see p. 10, note).

² See the sketch of these Capes in the Report to the King (p. 9); also see Hall's general map (IV).

³ Itivdlek Fjord (see p. 10, note); see also Hall's general map (IV), and his special map (I), on which their anchorage is marked b.

desired Land, into so good an Harbour; which done, the Captaine and I walked vp the Hills to see if we could see any of the people, having our Boat to row alongst with us. Hauing gone alongst the Riuer side vpon the tops of the Hills the space of three or foure English miles, at length, looking towards our Boat, wee saw vpon the Riucr-side foure of the people standing by their Houses, or rather Tents, couered ouer with Seale-skins.2 Wee comming downe the Hills towards them (they having espyed us), three of them ranne away vpon the Land, and the other tooke his Boat and rowed away, leaving their Tents. Wee, being come downe the Hills, called to our men in the Boat, and, entering into her, rowed towards the Sauage, who was in his Boat made of Seale-skins. Hee, holding vp his hands towards the Sunne, cryed Yota; wee doing the like and shewing to him a knife, hee presently came vnto vs and tooke the same of the Captaine. When hee had presently rowed away from vs, wee rowed a little after him; and, seeing it was but in vaine, we rowed aland again and went into their Tents, which we found couered (as is aforesaid) with Seale-skins; wee finding by the houses two Dogs, being very rough and fat, like in shape to a Foxe, with very great abundance of Seale fish,4 lying round about their Tents a drying, with innumerable quantities of a little fish like vnto a Smelt (which fish are commonly called Sardeenes), of which fish in all the Rivers are wonderfull skuls.⁵ These fishes also lay a drying round about their Tents in the Sunne in great heapes, with other

¹ Here, in Purchas, we find this side-note: "Our first landing in Groinland." This, from the use of the first person, may be regarded as Hall's.

² Here also, in Purchas, is a side-note: "Our first sight of the people." The Greenlanders are drawn on Hall's map (I).

⁸ The same as Yliout, the Greenlanders' greeting (see pp. 11, 12).

⁴ Seals were, of course, regarded as fish in 1605, as they still are by the ignorant.

⁶ Now usually spelled "schools" and used only of Cetaceans.

sundrie kindes.1 Then, entring into their Tents, wee found certaine Seale skins and Foxe skins, very well drest; also certaine Coates of Seale skins and Fowle skins, with the feather side inward; also certaine Vessels boyling vpon a little Lampe, the Vessell being made after the manner of a little Pan, the bottome whereof is made of stone, and the sides of Whales finnes; in which Vessell was some little quantitie of Seale fish boyling in Seale oyle; and, searching further, wee did finde in another of their Vessels a Dogs head boyled, so that I perswaded my selfe that they eate Dogs flesh. Moreouer, by their houses, there did lye two great Boates, being couered vnder with Seale skins, but aloft open, after the forme of our Boates, being about twentie footie in length, hauing in each of them eight or ten tosts² or seates for men to sit on; which Boates, as afterwards I did perceiue, is for the transporting of their Tents and baggage from place to place; and, for a saile, they haue the guts of some beast, which they dresse very fine and thin, which they sow together. Also the other sorts of their Boats are such as Captaine Frobisher and Master Iohn Dauis brought into England,3 which is but for one man, being cleene couered over with Seale skins artificially

¹ This fish was no doubt the Angmaksel of the Greenlanders (Mallotus arcticus, Cuv.), which is as important as an article of foodin Greenland as the herring is with us; but, though it is often called the Greenland Herring, it has no affinity to the Sardine, as it does not belong to the Herring family (Clupeida). It is closely allied to the smelt, both being of the Salmon family.

² "Tosts" are the same as "thousts" (see p. 11, note).

³ In Purchas' Pilgrimes, a note is here inserted in which it is stated: "There is one of these boats in Sir T. Smith's Hall." Frobisher, in 1576, obtained from the natives at least one of their boats (Best's True Discourse, p. 50, and Three Voyages of Frobisher, Hakluyt Society, 1868, pp. 74 and 86), while Davis tells that, on one occasion, he purchased from them no less than five (Hakluyt, vol. iii, p. 100, and Markham's Voyages and Work of John Davis, Hakluyt Society, 1880, p. 8).

dressed, except one place to sit in, being within set out with certaine little ribs of Timber, wherein they vse to row with one Oare more swiftly than our men can doe with ten; in which Boates they fish, being disguised in their Coates of Seale skinnes, whereby they deceive the Seales, who take them rather for Seales then men; which Seales or other fish they kill in this manner:-They shoot at the Seales or other great fish with their Darts, vnto which they vse to tye a bladder, which doth boy vp the fish in such manner that, by the said means, they catch them. comming aboord our ships, having left certaine trifles behind vs in their Tents, and taking nothing away with vs, within halfe an houre after our comming aboord, the Sauage to whom we had given the knife, with three others (which we did suppose to be them which we saw first), came rowing to our ships in their Boats, holding vp their hands to the Sunne, and striking of their brests, crying Yota. We doing the like, they came to our shippe, or1 Captaine giuing them bread and Wine, which, as it did seeme, they made little account of; yet they gaue vs some of their dryed fishes; at which time, there came foure more, who, with the other, bartered their Coats and some Seale skinnes with our folke for old Iron Nailes and other trifles, as Pinnes and Needles, with which they seemed to be wonderfully pleased; and, having so done, holding their hands towards the Sunne, they departed.

The thirteenth, there came fourteene of them to our ship, bringing with them Seale skinnes, Whale Finnes, with certayne of their Darts and Weapons, which they bartered with our people, as before. This day, I made observation of the latitude, and found this Roadsted in the latitude of 66 degrees 25 minutes; and the mouth of this Bay or Sound lyeth in the latitude of 66 degrees 30

¹ A misprint for "our."

minutes. Also, here I made observation of the tydes, and found an East and West Moone to make a full Sea; vpon the Full and Change more,1 it floweth three fathome and an halfe water, right vp and downe.

The fourteenth and fifteenth dayes, we rode still, the people comming to vs and bartering with vs, for pieces of old Iron or Nailes, Whale Finnes, Seales Skinnes, Morse Teeth, and a kind of Horne which we doe suppose to be Vnicornes Horne; at which time, the Captaine went with our Boat, to the place where we had seene their Tents, but found them remoued; and the other fish and the Seale fish lying still a drying. The Captaine, taking a quantitie of the Sea-fish2 into the Boat, caused some of the Mariners to boyle it ashoare, the Sauages helping our men to doe the same, the Captaine vsing them very friendly; they, hauing made about a barrell and an halfe of Oyle, leauing it aland all night, thinking to bring the same aboord in the morning. But the Sauages, the same night, let the same forth. Yet, notwithstanding, the Captaine shewed no manner of discontent towards them.

The sixteenth day, I went into the Pinnasse, to discouer certaine Harbours to the Northwards. The wind being at East South-east, I loosed and set saile; but instantly it fell calme, and so continued about an houre, when the wind came opposite at the West North-west, a stiffe gale, wespending the tide till the floud being come, I put roome gagaine,3 and came to an Anchor a little from the Frost in twelue fathomes, sandie ground. About one in the afternoone, the Frost departed from vs further vp the Bay,

¹ Query, a misprint for "moone."

² Probably a misprint for "Seal-fish".

³ According to Prof. Laughton (State Papers relating to the Defeat of the Spanish Armada, vol. i, p. 7, n.), "To room"=to leeward. It is only used adverbially, as "to bear room", "to go room", "roomwards", and seems to conceal the same idea as the still-familiar "to sail large".

which we did suppose to be a Riuer, promising to abide our returne two and twentie days.¹

The seuenteenth day, the wind continuing at the West North-west, blowing very hard; wee rode still, the people comming and bartering with vs.²

The eighteenth day, the winde and weather as before, wee riding still. This forenoone, there came to the number of thirtie of them, and bartered with vs as they had done before; which done, they went ashoare at a certaine point about a flight-shot³ off vs; and there, vpon a sudden, began to throw stones with certaine Slings which they had, without any injury offered at all; yea, they did sling so fiercely that we could scarce stand on the hatches.⁴

¹ Leyell's entries from the 12th to the 16th are the following:—

[&]quot;12. The wind S.W. by S.; their course S.E.; and the Admiral and Katten came to Greenland that same day about noon, and sailed up a river into the land; on the same evening, six boats with Greenlanders came and bought and sold with them."

[&]quot;13-16. They lay still there, except that they advanced further up into the land and called that river Danmark's Haffn; and in the same river the Admiral came aground, so that they had to work diligently before they got him off without hurt."

It will be observed that here he calls the whole fjord "Danmark's Haffn", and a little further on gives the name of "Kongen's Haffn" to the place which Hall describes by the former name; but, where he mentions them a second time, his names agree with Hall's. Whether, however, the names really at first were bestowed as Leyell says, and afterwards changed, or whether Leyell confused them, there is nothing to show.

² That the natives already on this day were preparing for hostilities appears from Leyell's entry:—

[&]quot;17. Fifty skinboats came with Greenlanders, armed with bows and slings, and intended to fight them, but they [i.e., the Greenlanders] kept behind high rocks, so that no one could hurt them."

The rocks were no doubt rocky islets, such as abound on this coast.

³ A "flight-shot" was anciently used as a measure of distance. It is said to have been about equal to the width of the Thames above London Bridge.

^{*} This happened in Sling Road (see p. 13, n.).

I, seeing their brutish dealing, caused the Gunner to shoot Falcon¹ at them, which lighted a little ouer them; at which time they went to their Boates, and rowed away. About one a clocke in the afternoone, they came againe to vs, crying in their accustomed manner, Yliont,2 they being sixtic-three in number. The shipper³ inquired of me whether they should come to vs or not. I willed him to haue all things in a readinesse. They comming in the meane time nigh to the Pinnasse, I did perceiue certaine of them to have great bagges full of stones. whispering one with another, began to sling stones vnto us. I presently shot off a little Pistol, which I had for the Gunner and the rest of the folke to discharge; which indeed they did, but whether they did hurt or kill any of them or not, I cannot certainly tell; but they rowed all away, making a howling and hideous noise, going to the same point whereas4 in the forenoone they had beene. Being no sooner come on Land, but from the Hils they did so assaile vs with stones, with their slings, that it is incredible to report, in such sort that no man could stand vpon the Hatches till such time as I commanded for to lose⁵ sailes and bonnets two mens height, to shield vs from the force of the stones, and also did hide vs from their sight; so that we did ply our Muskets, and other peeces such as wee had, at them; but their subtiltie was such that, as soon as they did see fire given to the Peeces,6 they would suddenly ducke downe behind the Cliffes,7 and, when they

¹ An old-fashioned kind of small gun, about the size of a 3-pounder.

² A misprint for "Yliout".

³ See p. 29, n.

⁴ A misprint for "whereat".

⁵ Query, misprint for "lace" (see p. 13).

⁶ Their "pieces" were, of course, match-locks, fired by the application of a piece of slow-burning rope, called "match".

The word "cliffes" scarcely conveys any clear meaning; and, as the "Report" has clippes, which is a Danish word meaning rocks,

were discharged, then sling their stones fiercely at vs againe. Thus, having continued there till foure a clocke, they departed away.¹

The nineteenth day, in the morning, about foure a clocke, it beeing calme, I departed from this Roadsted, so causing our men to row alongst the shoare till the tide of the ebbe was bent; at which time, it began to blow a fresh gale at North-west and by West, we turning downe till about two a clocke, when, the tide of floud being come, when I came to an Anchor in an excellent Hauen, on the South side of Cunninghams Mount, which, for the goodnesse thereof, I named Denmarkes Hauen.²

this is probably the expression used by Hall, which Purchas did not understand and transformed into "cliffes" (see p. 13, note).

¹ Leyell says that one of the Greenlanders was killed, or at any rate hurt, his entry being to this effect:—

[&]quot;18. They were reinforced, and, being twice as numerous as before, they attacked forcibly; then one of them was shot; after which the others hid themselves behind rocks as before."

² Hall's expressions here seem to imply that the harbour was on the same side of the fjord as Mt. Cunningham, viz., the northern, where a place amongst the islands, though not exactly S. of the mountain, is marked with the letter h. Of this h, however, no explanation is given. The d which marks Denmark's Haven, is found (but, on the original map, difficult to distinguish) near the eastern extremity of the island of Tinungasak, close to the southern shore. The harbour must, therefore, have been either the eastern entrance of the sound between that island and the mainland, or some little creek Leyell says: "19. They ran into another branching off from it. harbour which they called Kongen's Haffn, and the Admiral remained there until the 5th of July, but Katten meanwhile went to sea in search of other harbours." As it appears, both from Hall's and from Levell's own other statements, that Trost was not with him when he left for the N., the meaning of this passage (which must have been inserted when Levell, after his return, made a fair copy of his Journal) seems to be that Cunningham afterwards went there to await Hall's return, but on the 5th of July removed to the other harbour, where Hall found him. From Leyell's account of their return to King Christian's Fjord, it would seem as if Hall looked for Trost in or about Denmark's Haven. the same time, the statement may merely rest on some little confusion

The twentieth day, in the morning, the weather beeing very rainie, with a little aire of wind, I loosed and caused to row forth of the foresaid Harbour; and, comming forth betweene the Ilands and the maine, the people being, as it seemed, looking for vs, espied vs, making a hideous noise; at which time, in an instant, were gathered together about seuentie-three Boates, with men rowing to vs. I, seeing them, thought it best to preuent the worst, because we were to come hither againe; therefore, to dissemble the matter, I thought it best to enter into barter with them for some of their Darts, Bowes, and Arrowes, we finding euery one of them to bee extraordinarily furnished therewith; so rowing forth to Sea amongst the Ilandes, there stil came more Boats to the number of one hundred and thirtie persons; they still rowing by us, made signes to vs to goe to anchor amongst some of the Ilands; but I, preuenting their deuices, made certaine Skonces¹ with our sailes, to defend vs from their Stones, Arrowes, and Darts. They, seeing this, went certaine of them from vs, rowing to certaine Ilands, to which they did thinke wee would come, leauing no more but about ten men and Boates about vs, who rowed alongst the space of an houre with us, making signes of friendship to vs. At length, perceiuing that wee were not minded to goe forth amongst these Ilands vpon which the rest of their folke were, they threw certaine. shels and trifles into the Boat, making signes and tokens to fetch them, the which my Boy, called William Huntries, He being in the Boat, they presently shot him did.

arising out of the circumstance that Leyell, as we have already mentioned, where he first speaks of the King's Fjord, calls it Denmark's Haven, and in this place gives the name of King's Fjord to the harbour which really had been named Denmark's Haven.

¹ A "sconce" is a small fort; but, in this case, the word seems to be used more in the sense of a "screen" or "shelter", a meaning which according to Nares, it still retains in Cumberland.

through both the buttockes with a Dart; at which time, they rowed from vs, they mustering vpon the Ilands to the number of three hundred persons, keeping themselves farre enough from our danger. About sixe a clocke this Euening, it began to blow a faire gale Easterly. We, getting off to Sea, stood all this night North and by East alongst the Land.¹

A Topographicall Description of the Land as I did discouer the same?

Now, having proceeded for the discoverie of the Coast and Harbours so farre, and so long time as the time limited to me, therefore I thinke it convenient to make a briefe description of the same, according as by my short experience I found the same to be.

The Land of *Groenland* is a very high, ragged, and mountainous Country, being, all alongst the Coast, broken Ilands, making very goodly Sounds and Harbours, having also in the Land very many good Rivers and Bayes, into some of which I entred, sayling vp the same the space of

Leyell relates these incidents as follows:—"On the 20th, Katten set out thence, and 130 leather boats with Greenlanders came to him and gave to understand—out of pure roguery—that they wished to trade with him in a friendly way. They rowed with him two sea miles [vgesöes], but they durst not attack, till one of them had cast two red shells into the boat. They asked the pilot to bid his boy fetch them. As he climbed down for them, they shot him through both the buttocks with a dart and at once they all rowed away." On Hall's special map of King Christian's Fjord, a letter h, of which no explanation is given, is placed amongst some islands on the north side of the entrance. Very likely it indicates the place where this encounter took place.

² Similar descriptions of the country and its inhabitants are found in the accounts of Lyschander and Bielke, but they contain nothing of particular interest with regard to these voyages as such.

ten or twelue English leagues, finding the same very nauigable, with great abundance of fish of sundrie sorts. The Land also, in all places wheresoeuer I came, seemed to be very fertile, according to the Climate wherein it lyeth; for betweene the Mountaynes was most pleasant Plaines and Valleyes, in such sort as, if I had not seene the same, I could not have beleeved that such a fertile Land in shew1 could bee in these Northerne Regions. There is also in the same great store of Fowle, as Rauens, Crowes, Partridges, Pheasants,² Sea-mewes, Gulles, with other sundry sorts. Of Beasts, I have not seene any, except blacke Foxes, of which there are very many. Also, as I doe suppose, there are many Deere, because that, comming to certaine places where the people had had their Tents, we found very many Harts Hornes, with the bones of other beasts round about the same. Also, going vp into the Land, wee saw the footing and dunging of divers beasts, which we did suppose to be deere, and other beasts also, the footing of one which wee found to be eight inches ouer;3 yet, notwithstanding, we did see none of them; for, going some two or three miles from the Pinnasse, we returned againe to goe aboord. Moreouer, in the Riuers, we found sundry sorts of Fishes, as Seales, Whales, Salmons, with other sorts of Fishes, in great abundance. As concerning the Coast: all alongst it is a very good and faire Land, " having very faire shoalding of the same; for being three English leagues off the same, I found very faire shoalding

¹ That is, "in appearance".

² There are neither Partridges nor Pheasants in Greenland. By the former appellation, Hall refers, no doubt, to the Greenland Ptarmigan (*Lagopus rupestris*, Gmel.,=*L. reinhardtii*, Brehm.); but it is difficult to guess what he can have meant by the reference to Pheasants, unless he refers to the Pintail Duck (*Dafila acuta*), which is sometimes called the "Sea Pheasant".

³ These were probably the tracks of Reindeer in half-frozen snow, not of Musk Oxen (see *post*).

in fifteene fathomes; and, comming neerer the same. fourteene, twelue, and tenne fathomes, very faire sandie ground. As concerning the people: they are (as I doe suppose) a kinde of Samoites,1 or wandring Nation, trauelling in the Summer time in Companies together, first to one place, and, having stayed in that place a certayne time in hunting and fishing for Deere and Seales with other fish, streight they remoue themselves with their Tents and baggage to another. They are men of a reasonable stature, being browne of colour, very like to the people of the East and West Indies. They be very active and warlike, as we did perceive in their Skirmishes with vs, in vsing their Slings and Darts very nimbly. They eat their meate raw, or a little perboyled, either with bloud, Oyle, or a little water, which they doe drinke. They apparell themselves in the skinnes of such beasts as they kill, but especially with Seales skins and fowle skins, dressing the skins very soft and smooth, with the haire and feathers on, wearing in Winter the haire and feather sides inwards, and in Summer outwards. Their Weapons are Slings, Darts, Arrowes, having their Bowes fast tied together with sinewes; their Arrowes haue but two feathers, the head of the same being for the most part of bone, made in manner and forme of a Harping Iron. As concerning their Darts: they are of sundry sorts and fashions. What knowledge they have of God, I cannot certainly say; but I suppose them to bee Idolators, worshipping the Sunne. The Country (as is aforesaid) seemeth to be very fertile; yet could I perceive

¹ No doubt Samoyedes are meant. This people, which is still living scattered over large tracts in the extreme N.E. of Europe and the N. of Siberia, had become known to the nations of western Europe through the expeditions for the discovery of a North-East Passage. An account of them forms a principal portion of that collection of tracts, published in 1612 by Hessel Gerritsz., which also contains the earliest account of Hudson's discovery of Hudson's Bay.

or see no wood to grow thereon. Wee met all alongst this Coast much Drift-wood, but whence it commeth I know not. For, coasting all this Coast alongst, from the latitude of 66 degrees and an halfe vntill the latitude of 69 degrees, I found many goodly Sounds, Bayes, and Riuers, giuing names vnto divers of them1; and, purposing to proceed further, the folke in the Pinnasse with me did earnestly intreate me to returne to the ship againe, alleaging this: that, if we came not in convenient time, the people in the ship would mutinie, and so returne home before we came; the which, indeed, had fallen forth, if the Captaine, as an honest Gentleman, had not, by seuere meanes, withstood their attempts; who would needes, contrarie to their promises, have beene gone home within eight dayes after my departure from them. But the Captaine, respecting his promise to mee, would by no meanes consent, but withstood them, both by faire meanes and other wayes.2 that, vpon the seuenth day of Iuly, I returned again into the Kings Foord, which they in the ship had found to be a Bay; and, comming to the place where wee had left the ship, hoping to have found them there, I saw, vpon a certaine point, a Warlocke³ of stones, whereby I did perceiue

¹ For an account of this expedition, from June 20th to July 7th, based on Leyell's Diary, see the Introduction.

² The Danish accounts do not allude to any mutinous disposition of the crew; but, considering how often similar troubles occurred on English arctic expeditions, Hall's statements are by no means improbable.

³ This expression is, perhaps, derived from, or akin to, the Danish word Varde, signifying an erection (sometimes of wood, but generally of stones) which serves as a mark of something, as a memorial, as an indication of the right way, or suchlike. This is the term used by Leyell in speaking of those particular ones, and both Lyschander and Bielke mention that Varder were set up in suitable places to serve as guides to future visitors. The termination "lock" is, of course, a diminutive. The word "warlocke" was very likely in use in English at the time; for Gatonbe hereafter uses it (see post), while Foxe in

that they were gone downe the Ford. So, the tide of ebbe being come, it being calme, we rowed downe the Foord, finding, in the mouth of the same, amongst the Ilands, many good Sounds and Harbours.

The tenth day of Iuly, the wind being at North Northwest, I beeing in a certaine Sound¹ amongst the Ilands, it being high water, I weighed, [and] stood West, forth of the Foord, going to Sea on the South side, betweene a little Iland and the Maine; which Iland, at our first comming, we called *Frost Iland*,² after the name of the ship. We espied, on the South sides, certaine Warlockes set vp;³

^{1631 (}Voyages of Foxe and James, p. 90) seems to have understood its meaning, and omits the words "of stones". Cf. also, the derivation of the word "humlock", which is also used by Foxe (op. cit., p. 330).

¹ This is not indicated on the map. According to Leyell, it was named Kocksund. Most likely it was the Sound behind the island of Tinungasak, at the entrance of which Denmark's Haven was, and through which Hall would be sure to sail in search of the Admiral.

² Capt. Jensen identifies this island with one called Kekertarsuatsiak, which is correspondingly situated near the entrance of the fjord of Itivdlek. That it attracted the notice of Hall and his companions, he explains by the circumstance that, although only attaining a height of a few hundred feet, it is visible far and wide, on account of its isolated position (*Medd. om Grönl.*, vii, p. 46). Nothing is said, either in this narrative or in the Report to the King, about the island having been previously named Trost Island, notwithstanding Hall's statement above; but it is marked e and duly named on Hall's map (I) of the King's Fjord. Curiously enough, too, in the following year, he bestowed the name on another island much further south (see p. 76).

³ According to Leyell, three beacons. It seems that Capt. Cunningham and Hall had arranged a code of signs by means of beacons. The one beacon which Hall saw in King Christian's Fjord told him that the Admiral had sought another anchorage; the three beacons on Trost Island, that he was to be found somewhere in that neighbourhood—a useful precaution, as even a careful search amongst the islands might fail to discover him. Similarly, Leyell states, as already quoted, that, before entering the King's Fjord again, Hall had three beacons erected on one of the outer islands, no doubt to inform the Admiral, if by chance he should be exploring the neighbourhood, that Hall had returned and would be found in the King's Fjord.

wherevpon I suspected that the Frost might be there, commanded the Gunner to shoot off a Peece of Ordnance. they presently answered vs againe with two other. seeing the smoake (but heard no report), bore in to them, comming to an Anchor in a very good Sound by them, and found them all in health, the Captaine being very glad of our comming, forasmuch as hee had very much trouble with the company for the cause aforesaid. Also, in the time of our absence, the people did very much villanie to them in the ship, so that the Captaine tooke three of them; other of them also he slew; but the three which he tooke, he vsed with all kindnesse, giuing them Mandillions² and Breeches of very good cloth, also Hose, Shoes, and Shirts off his own backe.3 This afternoone, I, with my Boy, came againe aboord the ship, taking in this Euening all our prouision of water.4

The eleuenth day, the wind being at North North-east, we set saile forth of the Sound, which we named *Frost Sound*; but, before our comming forth of the same,

¹ Probably "suspecting" is meant.

² The Mandillion or Mandeville was a kind of loose garment without sleeves, or, if with sleeves, having them hanging at the back.

³ For a reference to the subsequent history of the three Greenlanders (who were taken alive to Denmark), see the Introduction.

⁴ Leyell's entries for these last days are as follows :-

[&]quot;7. A slight S.E. wind until 9 o'clock, afterwards N.W.; then they came back into Kongen's Haffn.

[&]quot;8. With a N.W. wind, they searched for the Admiral.

[&]quot;9. A light northerly wind. They passed by Denmark's Haffn, and came into a sound which they called Kocksund.

^{&#}x27;10. The wind W. by N., their course W.S.W.; they found three beacons on a rock, and there was the Admiral lying in a harbour which they called Troust Haffin."

⁶ This is no doubt the sound between the mainland and the island f Inugsuglusok, a little S. of the entrance of Ilivdlek. The sound is called in Danish Anders Olsen's Sund, from a well-known Danish merchant of that name, who afterwards erected a great *Varde* on the island, which, says Capt. Jensen, is still standing. Near the northern entrance

our Captaine commanded a young man whose name was Simon, by the expresse commandement of the Stateholder of Denmarke, to be set aland; wee also in the Pinnasse set another aland, they both being Malefactors: the which was done before our comming away, we giving to them things necessarie, as victuall and other things also.1 Thus, having committed both the one and the other to God, wee set saile homewardes, we standing forth to Sea, South-west and South-west and by West till noone, when, making observation, Queene Annes Cape bearing South and by East halfe Easterly some ten leagues, I found my selfe in the latitude of 66 degrees 10 minutes,2 when I directed my course South South-west till sixe a clocke, when wee were amongst much Drift Ice, being to leeward two points vpon our lee-bow, so that I was forst to lie off West North-west till wee were cleere of the same, at which

of the sound is a creek on the coast of the mainland, which, on the special map of King Christian's Fjord, is marked f and named Trost Haven. The sound itself is not named, and the island is only partly included in the map, but may be indicated by one of the small islands sketched—rather at random—along the coast, on the general map (IV).

¹ Leyell's words are: "II. A stiff Northeaster; their course S.S.W. untill the evening. The Admiral then caused a disobedient son to be landed on an island on which no people lived, and that person was called Simon Raffn." Hall mentions here the setting ashore of another convict from the pinnace, in expressions from which one would gather that it was done at the same time; but, as we have stated in the Introduction, it was done on June 26th, while Hall was exploring the country to the North in the pinnace. We have been unable to learn anything as to the nature of the crimes of these unfortunate men. It is difficult to say what official Hall intended to indicate by the term "Stateholder", as no Danish official bore that title.

² This combination of course, bearing, distance, and latitude, is impossible. In 66° 10′, Queen Ann's Cape could not possibly bear S. by E. half easterly at a distance of 10 leagues. Perhaps, in this place, as in another mentioned above, the bearing has been incorrectly copied. E. by S. half easterly is far more likely to have been correct.

time I directed my course South-west and by South, wee sayling so all the night following.

The twelfth day, the wind at North North-east, wee went away South-west and by South till ten a clocke, when we were amongst more Drift Ice, wee being againe to lie West North-west, to get cleere of the same, which we did about noone, we having this day and the Euening before a mightie hollow sea, which I thought to be a current, the which setteth thorow Fretum Dauis to Southwardes, as by experience I proved; for, making observation this day at noone, we found our selves in the latitude of 62 degrees 40 minutes, whereas the day before we were but in the latitude of 66 degrees 10 minutes, having made by account a South and by West way about ten leagues.² This afternoone I directed my course South South-west.

The thirteenth day, the wind as before, we steered still South and by West, being at noone in the latitude of 60 degrees 17 minutes, going at the same time away South and by East. This foresaid current I did find to set alongst the Coast of *Gronland* South and by East.

The fourteenth day, close weather, being an easie gale, we steering South-east and by East.

The fifteenth day, still close weather til noone, we steering as before, being in the latitude of 59 degrees. This day, at noone, I went away East South-east. This afternoone, it was hasie and still weather, when we had sight of some Drift Ice.

The 16 day, close weather with the wind at North-west and by West, our course East South-east til about ten a clock, when we met with a mightie bank of Ice to windward of vs, being by supposition seuen or eight leagues long, wee

¹ Query "forced" omitted.

² It seems that there must be some mistake in these figures.

steering South South-east to get cleere of the same. We met, all alongst this Ice, a mightie scull of Whales. Moreouer, wee light with a great current, which, as nigh as we could suppose, set West North-west ouer for America. This day, at noone, the weather being very thicke, I could have no observation. This Evening, by reason of the Ice, wee were forced to lye South and by West, and South South-west, to get cleere of the same, amongst which we came by divers huge Ilands of Ice.

The seuenteenth day, being cleere of the Ice, about fourc in the morning, I directed my course South-east by South till noone, at which time I went away East and by South, the weather being very haysie and thicke. About midnight it fell calme, the wind comming up Easterly.

The eighteenth day, the wind still Easterly, we lying East South-east, away vnder a couple of courses larboord tackt.¹ This day, in the forenoone, we saw certayne Ilands of Ice.

The nineteenth day, the wind still Easterly, with the weather very hasie.²

¹ See p. 28, u.

² For comparison and supplement we add the entries in Leyell's diary:—

[&]quot;12. A stiff North wind, their course S.S.W., and they were in much ice."

[&]quot;13. As before until noon; afterwards their course E.S.E.

[&]quot;14-15. As before until noon; afterwards a light S.E. wind.

[&]quot;16. A stiff N.W. wind; their course E.S.E., and they were amongst many large icebergs night and day.

[&]quot;17. The wind W. to North. Their course as before in much ice.

[&]quot;18. An easterly gale, with much rain, their course S.S.W. with much ice.

[&]quot;19. The wind easterly, with rain and fog; their course as before; in the afternoon the wind N.E., their course E.S.E.

[&]quot;20. As before in the forenoon.

[&]quot;21. The wind southerly, their course E.

[&]quot;21 [no doubt intended for 22]. The wind S.E. by E., their course E.N.E."

The first day of August, also, it was very thicke weather. with a faire gale at South-west and by West. This forenoone, wee met with a scull of Herrings, so that I knew wee were not farre from the Iles of Orkney; so, having a shrinke¹ at noone, I found vs in the latitude of 58 degrees 40 minutes, at which time I sounded with the deepest Lead, finding 42 fathomes, redde sandie ground, with some blacke dents.2 This euening, betweene fiue and sixe a clocke, wee sounded againe, when we had no more but twentie fathomes, dent ground, whereby I knew that we were faire by the shoare, when some of our men looking forth presently espied one of the Ilands of Orkeney. being very thicke, wee cast about, and stood with a small sayle to Seaboord againe, we lying West North-west off all this night.

The tenth day, about five in the morning, we came thwart of the Castle of *Elsonuere*, where we discharged certaine of our Ordnance; and, comming to an Anchor in the Road, the Captaine, with my selfe, went ashoare; and, hearing of his Majesties being at *Copeman-Hauen*, wee presently went aboord againe, and set sayle, comming thither about two a clocke. The Pinnasse, also, which he⁸ had lost at Sea, in which my Countreyman *Iohn Knight*

¹ That is, a falling off of the wind, which would render the deck steadier, and thus enable Hall to obtain the elevation. The use of the word "shrink" in speaking of the wind may still survive in dialects, but is otherwise obsolete; it is curious that a corresponding term in Danish, Krympe, was likewise used of the wind in olden time, but has also become obsolete.

² The word "dent" really means the mark of a tooth, or a mark such as might be produced with a tooth, and is still so used in some parts. Such a mark may of course be a mere impression, which, if deep, would appear dark, and thus the word has come to be used, as here, of simply a dark spot. A little farther down we have "dent" in the meaning of dark-spotted.

³ Probably a misprint for "we".

was Commander, came also the same night about foure a clocke; both they and we being all in good health, praised bee Almightie God.¹ Amen.

¹ According to the Report (see p. 15) and Leyell's Diary, it was on the 23rd of July that the pinnace was left behind. Otherwise the sail of the latter across the Atlantic was uneventful, because Leyell has no entry between the 23rd of July and their arrival at Copenhagen or, perhaps, has not included any such in the fair copy of this journal. His journal concludes thus:—

[&]quot;23. The wind S.E., with much rain and fog, their course northerly by E., and then Katten was separated from the Admiral, and did not find her again until the 10th of August in the evening at 9 o'clock at Copenhagen, and then Löffuen had long been home. God be praised."

An Account of the Danish Expedition to Greenland, under the Command of Captain Godske Lindenow, in 1606.

BY JAMES HALL, CHIEF PILOT; as abbreviated by the Rev. Samuel Purchas.

[From Purchas His Pilgrimes (London, 1625), vol. iii, pp. 821-827.]



E departed from Copeman-Hauen the seuen and twentieth of May, in the yeere of our Redemption 1606, with foure ships and a Pinnasse. The Frost, beeing Admirall, wherein went for principall Captaine of the

Fleet Captaine Godske Lindeno, a Danish Gentleman, with my selfe, being, vnder God, Pilot Maior of the Fleet. In the Lyon, which was Vice-Admirall, went, for Captaine and Commander, Captaine Iohn Cunningham, a Scottish Gentleman, who was with me the yeere before. In the Yewren, went Hans Browne, a Gentleman of Norway. In the smal ship, called The Gilleflowre, went one Castine Rickerson, a Dane. In the Pinnasse, called the

4 Carsten Richardson (see Introduction).

¹ It should be noted that, whereas, on the first voyage, Cunningham had held supreme command and Lindenow the second place, their positions were now reversed.

² Örnen: Commonly called "the Urin", or "the Vrin", in the following narrative.

³ Hans Bruun, author of the Journal which we shall have to quote.

Ca went one shipper Andres Noll, of Bergen, in Norway. So, by the prouidence of God, wee weighed and set saile about sixe a clocke in the Euening, with a faire gale at South South-west, comming to an Anchor in Elsonoure Road to take in our water.

The nine and twentieth, in the morning, we shot off a Peece of Ordnance for all the Captaines and Commanders to come aboord of vs; who, being come, our Captaine commanded the Kings Orders to bee read; which done, they returned aboord; at which time, wee weighed with a faire gale at East North-east standing away North and by West till I had brought the Cole² North-east and by East off, when I steered away North North-west, and Northwest and by North. This Euening, about fiue a clocke, I set the Annold,³ it bearing West halfe Northerly, three leagues and an halfe. All this Euening, wee stood away North-west and by North.

The thirtieth day, the wind at East South-east, wee steering as before, this morning, about sixe a clocke, the Lesold⁴ bore West and by North of vs, sixe leagues off. At fine this Enening, the Scaw bearing West South-west, fine leagues, I directed my course West North-west, with the wind at North-east and by East.

The one and thirtieth, in the morning, very hasie weather, with a stiffe gale at East North-east, we steering West North-west away, till about nine a clocke, when we had a shrinke of the Land,⁵ which was the wester

¹ Nolk (see Introduction).

² Kullen, a long narrow ridge, 615 feet high, forming a conspicuous promontory on the Swedish coast at the northern entrance of the Sound.

³ The island of Anholt, in the Kattegat.

⁴ The island of Læssö, in the Kattegat.

⁵ A "shrinke of the land" would mean a gap in a coastline, just visible over the horizon, such as would indicate the mouth of a river or inlet. Elsewhere (see p. 52), Hall speaks of a "shrinke of the wind".

gate of *Mardo*.¹ We steering alongst the Land, we came to an anchor in *Flecorie*,² where we were to make and take in wood and water.

The second of Iune, we weighed and came forth of the Harbour of Flecorie about sixe in the morning, having a fresh gale at East North-east. About eleuen at noone, I set the Nasc of Norway, it bearing North North-west, foure leagues off. The fourth day, in the morning, about two a clock, we were faire by the high Land of the Yeddoe.3 I, causing to cast about, stood to the Southwards, West and by South and sometimes West. This day, at noone, I found my selfe in the latitude of 57 degrees 45 minutes, the Nase of Norway bearing East North-east, two and twentic leagues off. This day, at noone, also, I cast about and stood to the Northwards, lying North with the stemme, having the winde at North North-west. This afternoone dyed one of our Groinlanders called Oxo.4 All this euening and the night following, the winde as before, we lying also North with little winde.5

The seventh day, the winde at South-west and by South and South South-west, we steering West and West and by North. This day, at noone, we were in the latitude of 58 degrees 40 minutes. The tenth day, about foure in the

3 The only place in the neighbourhood in question which now bears a similar name appears to be Jæderen, a comparatively low and flat district along the sea-shore, north of Ekernsund. Hall may here refer to some high land adjoining Jæderen.

¹ Mardö or Mærdö is a small island at the entrance to Arendal.*

² Flekkerö (see p. 3, note).

⁴ This Greenlander was on board Örnen. Bruun says in his Journal:—"On the 4th died my Greenlander." We may take this opportunity of stating that Bruun's first entries, down to the fourth of June, only record their departures from and arrivals at Copenhagen, Elsinore, and Flekkerö.

⁶ Here Purchas adds, in a side-note: "The fift and sixt mostwhat calme"—information no doubt derived from Hall's original MS, which he was abbreviating.

morning, it began to blow a fresh gale at East and by South; at which time, we stood alongst the Land1 to the Southward till I had brought the South Head of Shotland, called Swinborne Head,2 North-west and by North, about three leagues off; and Faire Ile next hand, South-west and by South, eight leagues off; at which time, I directed my course away West, with a fresh gale at East South-east, about halfe an houre to three. I set the South head of Shotland, it bearing North-east, eight leagues off; Faire Ile, next hand, South-east, seuen leagues off; foule,3 next hand, North, foure leagues; wee still steering away West with a fresh gale at East South-east. All this afternoone and the night following, it was very thicke and raynie weather, the winde continuing as before. This night, at midnight, dyed the Groenlander which we had aboord us named Omeg.4

The fourteenth day, the winde as the night before, a faire gale, we steering as we did before, with haysie weather, hauing a shrinke,⁵ at noone, I found vs in the latitude of 58 degrees 40 minutes, hauing made a West and by South way Southerly, two and thirtie leagues, differing to the Westward from the Meridian of the Nase 19 degrees 45 minutes.⁶ This afternoone, we had a faire

That is, no doubt, the land of Shetland, the falling in with which was probably mentioned before in the unabbreviated MS.

² Sumburgh head (see p. 3, note).

³ Foula, originally Fugley: that is, "Bird-island".

⁴ Bruun has only two entries for June, after the 4th, viz.: "On the 10th, we sailed between Hetland and Færo", and "on the 13th [may be 23rd], in the course of the night, Löffuen was separated from Trost, Gillebrandt, and the pinnace. Next day, they came together again."

⁵ See p. 52, n.

⁶ This is the only computation of longitude given by Hall in his narratives. It was probably from dead reckoning; and there are, of course, no means of ascertaining whether or not it was correct. It seems, however, from a passage in Luke Foxe's North-West Fox (1635, p. 180; see also Miller Christy's Voyages of Foxe and James, p. 280)

gale at South-east, with thicke weather, we steering away West

The fifteenth day, the winde as before, we steering away West, being, by my imagination, in the latitude of 58 degrees 40 minutes. The three and twentieth day, the winde at the North-east, a faire gale, we steering betweene the West North-west and the West and by North, being at noone in the latitude of 56 degrees 10 minutes, hauing, by reason of a Northerly current, contrarie to my expectation, made a West way Southerly two and twentie leagues. The Compasse, also, as I doe suppose, being varied more then a Point to the Westwards.

The first of Iuly, wee saw Land, being eight leagues off, with a great banke of Ice lying off South-west; wee, setting our tacks aboord, laid off East and by South and East South-east, to double the same. About two a clocke, having doubled the same, wee went away West and by South all this evening and night following. This Land I did suppose to be Busse Iland; it lying more to the Westwards then it is placed in the Marine charts.²

that Hall, at some time or other, calculated the longitude of Cape Farewell, which he computed to lie 18° west of the "first Principal Meridian" (that of Ferro, in the Canaries). It really lies, however, about 26° west of that meridian. Of this, we read nothing in Hall's narratives as we have them in Purchas, who very likely cut out, in the course of his abbreviation, some passage referring to the matter. It may be, however, that Foxe had the information by hearsay from Baffin, with whom we know that he was acquainted (see Miller Christy's Voyages of Foxe and James, p. 370).

² Bruun does not note anything between the 13th (? 23rd) of June and July 1st, when he merely remarks: "On the 1st, we saw the first ice"; but he says nothing about any land having been observed. Probably ne considered what Hall took for land to be only a fog-bank, and rightly so. Hall's mistake is easily explained when it is remembered that he was on the lookout for Busse Island, the existence of which was generally believed in at the time (see p. 24, note). Luke Foxe, for instance, in 1635 (North-West Fox, p. 55), appended to this passage the note: "Busse Ile again discovered".

The second day, thicke weather, with the winde at North North-west, we steering West and by North. This afternoone, we were in a great Current setting South South-west; the which I did suppose to set betweene Busse Iland and Frescland over with America; wee steering West North-west with a faire gale at North. This night, about nine a clocke, the Pinnasse came foule of the Vice-admirall, where, with her anchor, shee tore out about a foot of a planke a little above water and broke downe the beakes head.

The sixth, making observation, I found vs in the latitude of 58 degrees 50 minutes, contrarie to my expectation; whereby I did see the Southerly Current to bee the principall cause. The seventh day, the winde at North and by East, we lying West North-west, being at noone in the latitude of 59 degrees 40 minutes, our way North-west two and twentie leagues. This evening, I found the North Point of the Compasse to be varied 12 degrees 5 minutes to the Westward of the true North.

The eight day, the winde came vp more Southerly, betweene the South-west and the South-west and by West, with an easie gale, we steering away North-west and by West; being at noone in the latitude of 59 degrees 30 minutes, having, by reason of the Current and Variation, made a West way Southerly about ten leagues.

¹ It was, no doubt, the East Greenland Current.

² This accident Foxe regarded as "A Caveat for Commanders in Fleets" (see *North-West Fox*, p. 55, and Miller Christy's *Voyages of Foxe and James*, p. 92).

³ Bruun's next entries after July 1st are the following: "On the 4th, in the night, in a great gale, the pinnace strayed from us", and "On the 8th, died my cooper". After this, he has nothing till the 13th of July. As there is no further mention of the pinnace in any of the accounts, it would seem that she returned home. Very likely her commander, Nolk, was not provided with means for independent navigation.

The ninth day, close weather; it being calme all the forenoone, wee perceiuing by our ships, which lay becalmed, a violent current setting South-west. This day, at noone, we were in the latitude of 59 degrees 40 minutes.

The tenth, about foure in the morning, the winde came vp to the North North-west. I, casting about, stood to the Westwards, lying West with the stemme, being in the latitude of 60 degrees 16 minutes. We saw the coast of America about nine leagues off; at which time, I made observation of the variation, and found the Needle varie 24 degrees to the Westwards of the true North.

The Hill tops were couered with snow, and the shoare to the Northwards full with Ice; but, to the Southwards, it seemed cleere. Here I found a great current to set West into the shoare; which, about midnight, did bring vs to be incumbred with very many Ilands of Ice, having much to doe to get cleere off the same without danger; but, by God's helpe, it being faire weather, with a fresh gale at South-west, wee got cleere of the same, standing East South-east and South-east and by East.¹

The fourteenth, in the morning, being cleere of the Ice, I went away East North-east and North-east and by East till eight a clocke, when I directed my course North-east and by North, being at noone in the latitude of 59 degrees, the Cape or Head land which wee saw that night bearing

¹ Hall's account, as here rendered, must naturally be understood as if it had been on the 10th that they saw America; but, in Bruun's Journal, we find the following: "On the 13th, we had sight of America." This date is probably the right one, because Hall's statement as to what happened on the 14th seems to be an immediate continuation of the next foregoing. As not a little has evidently been left out here by the abbreviator, it is easy to understand how, by careless contraction, the events of the 13th may have been connected with those of the 10th, so as to cause a misunderstanding. Purchas here adds in a side-note: "Sight of America in 58 degrees and 30 minutes"—information no doubt contained in Hall's original MS.

West South-west, sixteene leagues off.¹ All this afternoone and night following, it was for the most part still weather. This euening, I found the variation 23 degrees 55 minutes.

The sixteenth, faire weather, with a fresh gale at East South-east; our course as before, being in the latitude of 60 degrees 20 minutes; the ships way North and by East northerly, twentie leagues. This afternoone and the night following, the wind as before, we steering still North-east and by North.²

The eighteenth, also³ thicke weather, being forced to stand away North North-west to double a great banke with great Mountaines of Ice almost incredible to be reported; yet, by the helpe of God, wee passed the same, sayling all this day by great and huge mountainous Ilands of Ice, with the winde at South-west and by South, being at noone in the latitude of 63 degrees 45 minutes. Wee did see our selues beset round about with mightie bankes of Ice, being forced to make more saile and to lye to and againe all this night to keepe vs cleere of great and small Ilands of Ice, where many times we were in such danger, that we did looke for no other thing then present death, if God had not beene mercifull vnto vs and sent vs cleere weather, where by his assistance we kept our selues very hardly and with great difficultie cleere of the Ice.

The nineteenth day, in the morning, cleere weather, with a fresh gale at South-west, wee plying amongst the Ice to see if wee could get a gut to get cleere of the same;

¹ Probably either Nagsarektok (Cape Gulch) or Mount Razorback (3000 ft.), forming respectively the southern and northern shoulders of the entrance to Nachvak Bay, on the coast of Labrador.

² Bruun's next entry refers to this date. He says:—"On the 16th, we saw many wonderful rainbows on the sky."

This word "also" bears further witness of the carelessness with which Hall's account has been abbreviated, as no thick weather has been recorded before. Probably it happened on the 17th.

at which time, wee saw the Land of America, about the latitude of 64 degrees, it lying next hand South and North, being high ragged Land couered with snow, the shoare being all beset with Ice.1 So, lying off and on amongst the Ice, in great perill till about noone, when God of his goodnesse sent vs to espie a little gut, where we went through, and stood South South-east away, comming still by many Ilands of Ice. Heere I did finde, both by my course and reckoning (the variation also of the Compasse respected), that wee were carried with a mightie Current to the Westwards; as, both now and afterwards, wee did probably prooue and see the same. For I, setting my course from the coast of America, in the latitude of 58 degrees and a halfe for the coast of Groenland, North North-east, with a compasse whose wyers were placed, more then two third parts of a Point to the Eastwards of the North (the variation being 23 degrees 30 minutes Northwesting and 24 degrees, as by observation I found betweene the latitude of 58 and a halfe, and 54 degrees),2 yet I did finde my selfe (contrarie either to mine owne or to any of their expectations which was in the Fleet with me) carried almost foure Points with the Current to the westwards ouer our judgements.3

¹ If the latitude named (64° N.) be correct, they must have fallen in with the coast midway between the entrances to Frobisher's Bay and Cumberland Sound.

² This passage is evidently to some extent corrupted. They had nowhere been near 54° of latitude. There can be no doubt that 64° (the latitude mentioned above) is meant. Purchas appears not to have been able quite to understand the matter, as he adds in the margin the word "Note".

³ In *Purchas his Pilgrimes*, we find the following note is added here: "Here I did give direction to the other steerman to direct their course to *Groenland*." This sentence (the connection of which with the preceding sentence only appears from the following) is most likely to be understood as conveying a fact which had been

The twentieth, wee still sayled to the Eastwards, by many great Bankes and Ilands of Ice, being still compassed in, wee being forced to stand to the Southwards to get cleere; where, being sometimes becalmed, wee did plainly see and perceiue our selues carried into the Ice to the westward very violently. This Current setteth West North-west. The twentieth, in the euening, I found the Compasse varied 23 degrees.

The one and twentieth day, in the morning, faire weather, wee espyed a gut through the Ice, it seeming cleere to the southwards of the same; where, bearing into the same, about noone, wee were cleere of all the Ice by the mercifull prouidence of God. Here I observed the latitude, it being 63 degrees 33 minutes. Now, having, the one and twentieth day, at afternoone, caused the Admirall to call the other Captaines and Steermen aboord, with whom wee might conferre, and having shewed briefly my reckoning, with the other events which (contrarie to my expectation) had happened, the cause whereof at that instant they did plainly see and perceive, they confessing the Current (as they did now plainly see) to bee the cause of the same. So having done, I gaue to the other Steermen directions that, being cleere of the Ice, they should goe betweene the East and the East and by North ouer feathe coast of Groenland, and not to the Northwards of the East and by North, because of the former euents. And now, at this instant, by God's helpe, being cleere, I called to them, giuing the same directions.1 This

left out in the process of abbreviation, but which Purchas (finding, a little farther on, what probably is a reference to it) wished to preserve. The printer, however, did not insert it in its proper place in the text, but left it in the margin.

There seems to be a want of clearness in the preceding statement. The fact seems to be that, on the 19th, finding himself out of the

afternoone and the night following, it was calme. This euening, I found the Compasse varied 23 degrees 25 minutes.

The two and twentieth day, at noone, I found vs in the latitude of 63 degrees 20 minutes. The three and twentieth, faire weather, the ayre very cold, as with vs in the moneth of Ianuarie, the winde variable betweene the East Northeast and the South-east and by East, being at noone in the latitude of 63 degrees, having made a South-east and by South way eleuen leagues. This day, at noone, I cast about to the Westwards, the other ships doing the like, lying North-east and by North with the stemme, finding this evening the Needle varied to the Westwards 23 degrees 30 minutes.

The foure and twentieth, the winde variable betweene the South South-east and the South-east and by South, with raine and fogge. This day, about eleuen a clocke, wee did see much Ice to leeward; wherefore I cast about to the Southwards, the winde comming to the East Northeast, wee lying South-east with the stemme, supposing the ship to haue made a North and by West way halfe Northerly, two and twentie leagues. This afternoone, by reason of the fogge, we lost sight of the *Lion* and the *Gilliflowre*, wee looking earnestly forth for them and shooting (both we and the *Urin*) divers pieces of Ordnance,

calculated position, Hall explained the fact to his colleagues as a consequence of unforeseen circumstances beyond his control, and then ordered them to keep or continue a N.N.E. course for Greenland. But, a couple of days after, still finding himself carried out of his right course, he directed them, in order to make necessary provision for the action of the current, to adopt a more directly easterly course, explaining to them, as he had done before, the reasons of his change. We see now why Purchas—or whoever looked over the abbreviated account—found it necessary to make the addition which appears as a side-note to the narrative of the 19th, which records the giving of the order countermanded on the 21st.

but wee could neither see nor heare them; at which time, the winde came vp Southerly, wee standing away our course betweene the East and East and by North.

The fiue and twentieth, wee had sight of Groenland, being about ten leagues to the Southward of Queene Annes Cape.² Wee standing away East South-cast, in with the Land, with the winde at South. All this night, it did blow very much, wee steering North by West and North North-west.

The seuen and twentieth day, in the morning, was reasonable cleere weather, with a fresh gale at South Southwest. This morning, between foure and fine of the clocke, I espyed Queene Annes Cape to bear East by South next hand of mee, and King Christians Foord South South-east of me, being thwart of Rumels Foord, Queene Sophias

¹ This incident is mentioned by Bruun, from whose Journal it appears that during these days they were much troubled by fog and ice, the vessels being on that account several times separated. The entries, since the one last quoted, are as follows:—

[&]quot;On the 20th, Örnen and Gillebrandt were separated from Trost and Löffuen on account of a great fog and much dreadful ice; but by God's help they came together again the same evening.

[&]quot;On the 21st, Örnen was separated from Trost, Löffuen and Gillebrandt, in a great dark fog.

[&]quot;On the 22nd they came together again.

[&]quot;On the 24th, in a great fog, Löffuen and Gillebrandt were separated from Trost and Örnen."

² Bruun, who has no entry on the 25th, says:—"On the 26th, we had sight of Greenland"; and this would appear to be the right date, considering that on the 27th they were opposite Rammel's Fjord, after having been, when they sighted Greenland, only ten leagues S. of Queen Anne's Cape. Sailing, as Hall says they did, all night in a northwesterly direction, they would naturally be opposite Rammel's Fjord, as he says they were, early in the morning of the 27th, after having sighted Queen Anne's Cape the night before; but it would be strange if they had consumed two days over so small a distance.

³ This combination of bearings is impossible, Queen Anne's Cape *being S. of King Christian's Fjord (Itivdlek). Apparently the bearing of the cape should have been given as S. by E., instead of E. by S.

Cape bearing North halfe westerly, about five leagues off. Therefore I thought it convenient to put into Cunninghams Foord, where the siluer was, both in regard that I had sworne to his Maiestie as concerning the same, and also because wee were expressly commanded to bring home of the same.1 So, having a faire gale at West South-west, wee came into the aforesaid Riuer, anchoring in a very good Sound, hard by the Vre,2 in sixteene fathoms, at the mouth of Cunninghams Foord, about five of the clocke. There came presently foure of the Countrie people vnto vs, after their old accustomed manner. This euening, about sixe of the clocke, the Vrin anchored by vs. night, the Admirall, my selfe, and Captaine Browne went on Land to see the Myne of siluer, where it was decreed that we should take in as much thereof as we could.3

¹ Hall here refers to "the silver" as something which his readers might be expected to know all about, although there is no reference to it in the earlier portion of this account, as printed in Purchas. Probably something was said concerning it in the unabbreviated narrative. The supposed silver mine had been discovered on the voyage of 1605, though there is no mention of it in Hall's account of that voyage—a somewhat remarkable fact which we have discussed in the Introduction.

² This word, though printed with a capital and in italics (probably through confusion with the name of the vessel which Purchas calls "the *Vrin*", *i.e.*, *Ornen*), should doubtless have been "vre", that being an old form of "ore" (as used by Gatonbe hereafter), in allusion to the supposed silver ore.

³ The gap which here occurs in Hall's account may be filled up by means of Bruun's Journal, from the contents of which we may infer that some of these days were spent mainly in quarrying the supposed silver ore, after which they commenced to explore the neighbourhood on short excursions by boat, several times spending the night away from the ships. He says:—

[&]quot;On the 27th, we came into a good harbour, both *Trost* and *Ornen*; and, before we had got our anchors in the ground, the Greenlanders came alongside us; on the same day, we went on shore to view them.

[&]quot;On the 31st, died one of my sailors.

[&]quot;Augusti: On the 1st, he was buried in Greenland soil; on the same day we took the last [lot probably of the ore] on board.

On Sunday, the third of August, the Sauages, seeing our curtesie toward them, bartered Seales skinnes and Whales finnes with vs; which being done, wee1 went to our Boat and, rowing away, three of them, taking their Boats, rowed with vs vp the Foord,2 calling to other of the people, telling them and making signes to vs of our dealing towards them. Then they also came to vs and bartered with vs for old Iron and Kniues, for Seales skinnes and coates made of Seales skinnes, and Whales finnes, and rowed still all with In the end, having rowed five or sixe leagues vp the Foord, and seeing it to bee but a Bay, wee returned alongst many greene and pleasant Ilands, where wee found good anchorings. The people still followed vs, to the number of fiue and twentie persons, till about sixe of the clocke, when it fell thicke, with some raine, and, the winde being Southerly, wee rowed in among the Sounds, at which time they went from vs. Wee, rowing our Boat to one of the Ilands, went to supper. And, having supped, wee rowed some three leagues vp an other Foord, where we found very shallow water, in which place we stayed with our Boat all that night.3

[&]quot;On the second, the Admiral and some of our men went into another harbour to explore the country.

[&]quot;On the 3rd, we came back [etc.; see p. 68, n.]."

Fig. 1 As appears from Bruun's Journal, "we" means Hall and Bruun's lieutenant.

^{2 &}quot;The Foord" means, of course, Cunningham Fjord, which we have shown in the Introduction to be the Southern Kangerdluarsuk, N. of Holsteinborg. It should be borne in mind that the ships were not anchored in the fjord itself, but amongst the islands outside, to the S. of the entrance. From Bruun's Journal, just quoted, we learn that they only that morning (on the 3rd) returned from an excursion, which is not mentioned in the account as it stands in Purchas. There is nothing to show where they had been to. Perhaps Hall failed to record the point, or perhaps the abbreviator cut out his record; but the trip was probably to the S. of their anchorage, as they now went N.

The fourth day, in the morning, about three of the clocke, wee returned to our ship againe, with a gale of winde Southerly, being somewhat thicke and raynic weather, sayling by the Land among the Ilands, till we came three leagues to the Northwards of Queene Sophias Cape; when, going without the Ilands, wee met with a very high Sea, so that wee had much to doe; but, by the providence of Almightie God, the Boat was preserved from being swallowed vp of the Sea. In the end, wee got againe among the Ilands; and so, about noone, wee came to our ships.²

The fift day, some of our men went on Land among the Mountaines, where they did see reine Decre.

The sixt day, I, casting about, stood into the shoare South-east, till wee had brought Ramels Foord East and by North off vs, bearing roome³ for the same Foord. There goeth a very hollow Sea betweene the Ilands of the Kings Foord and Ramels Foord. The winde

Fjords. Outside these two inlets, the islands cluster very thickly, forming a regular "Skjærgaard", as it is called in Norway.

¹ That is to say, they set out at 3 o'clock in order to return.

² The wind was southerly, right in their teeth, and it appears that they sailed westwards, along the coast, which projects considerably, as far as the promontory formed by the Kangarsuk mountain, in the hope of being able to tack home in the open sea; but, when they came outside the islands, three leagues to the N. of Queen Sophia's Cape, they found it so rough that they were fain to seek the shelter of the islands again and had to row back to their ships. Another excursion, in which Hall does not seem to have taken part, was made after their return, as recorded by Bruun, whose entries for these days are the following:—

[&]quot;On the 3rd, we came back. On the same day, Master Hall and Phillip, the lieutenant, went into another harbour to explore.

[&]quot;On the 4th they returned; on the same day, the Admiral and I went into another harbour to explore the country, and saw on that occasion a boat so large that 20 men might sit in it, and with it other implements such as are used in those parts, and we found two tents there."

³ See p. 38, n.

being somewhat still, wee towed on head with our Boats till wee came thwart of a Bay, in which I was in the Vrins Boat, which I named Fos Bay, after the name of Philip de Fos, Pilot of the Urin. But the Admirals wilfulnesse was such that I could by no meanes counsaile him therein, though night were at hand, but hee would goe vp the Foord till wee came on the starboord side of the Foord, to sixe and twentie fathomes, sandie ground. The Vrin let fall anchor by vs; but, the winde comming off the Land (our Captaine and Companie being so obstinate and willfull that I could by no meanes get them to worke after my will), the ship draue into the mid-foord, where wee could have no ground at an hundred fathoms, till the Tyde of flood came, when the flood set the ship to the shoare; but I, laying out a Cage-anchor,1 got the ship off and, setting our foresaile, stood for another roade vp the Riuer.2

The eight day, about foure in the morning, wee came to an anchor in twentie fathomes, sandic ground, having very faire shoalding within vs. About noone, the *Urin* came and anchored by vs.³ It floweth in this Riuer South-east

¹ A "kedge-anchor" was a small anchor, capable of being carried in a boat for such purposes as that here mentioned.

² Fos Bay we identify with Ikertok. Bruun (who has no entry for the 5th) relates the incident of the sixth in the following manner:—

[&]quot;On the 6th towards evening, we left that harbour with *Trost* and *Örnen* and came the same evening in another harbour; in the same night, *Trost* drifted away from us about a mile further up the harbour, dragging both cable and anchor."

³ According to Bruun, this happened on the 7th. In his Journal it is stated, in continuation of the above: "On the 7th, we weighed anchor and sailed up the river to where *Trost* was lying." As Bruun was Captain of *Örnen*, he cannot be supposed to have made a mistake in this respect; nor is it likely that he would have waited more than a whole day before joining the Admiral. As there is no mention of the 7th in Hall's account, as it stands in Purchas, "eight" may very well be supposed to have been substituted by the abbreviator for 7th, as it probably was in Hall's own MS.

and North-west, and it standeth in the latitude of 66 degrees and 25 minutes.¹

The ninth, in the morning, our Captaine, with the Captaine of the *Urin*, went with their Boates vp the Riuer, where they did come to see their winter houses,² which were builded with Whales bones, the balkes being of Whale's ribbes, and the tops were couered with earth, and they had certaine Vaults or Sellers vnder the earth foure square, about two yards deepe in the ground. These houses were in number about some fortie.³ They found also certaine Graues made vp of stones ouer the dead bodies of their people, the carkasses being wrapped in Seales skins, and the stones laid in manner of a Coffin ouer them.

This day, in this place, we set a man on Land, which had serued our Captaine the yeere before; which, for a certaine fault committed by him, our Captaine left behinde in the Countrie. About noone, our men came aboord againe; and, after Dinner, some of the people came vnto vs, of whom we caught fiue, with their Boates, and stowed them in our ships, to bring them into Denmarke, 5

¹ This figure for the latitude of Fos Bay can scarcely be the one given by Hall, as he always places King Christian's Fjord, which is farther south, in 66° 30′. As this bay was not explored on the first voyage, it is not put down on Hall's map. Where so many inaccuracies seem to occur, one becomes suspicious; and, even apart from that, it seems strange that the tide in the Ikertok should flow S.E. and N.W., seeing that its main direction is S.W. and N.E.

² The houses of the natives are, of course, meant.

³ Purchas here inserts in a side-note: "A town found ten leagues up the river", the distance being no doubt obtained from Hall's unabridged MS.

⁴ See the Introduction for a notice of the subsequent history of these Greenlanders in Denmark.

⁵ Mr. Markham states (Voyages of Baffin, p. 28, note) that: "In the curious old Schiffer-Gesellschaft at Lubeck, there is an old Kayak,

to enforme our selues better, by their meenes, of the state of their Countrie of *Groineland*, which, in their owne language, they call *Secanunga*, and say that, vp within the Land, they have a great King, which is carried vpon mens shoulders.¹

The tenth of August, in the morning, the winde being at East South-east, we weighed and came forth of Rombes Foord;² but, being come forth to Sea amongst the Ilands, the winde came vp to the South-west and by South, the Sea going maruellous high, we lying West and West and by North to Sea, doubling certaine Ilands and Rocks; where the Sea going so wonderfull high had set vs vpon the Rocks, where we had all dyed, if God, of his mercy, at that instant when wee saw nothing before our eyes but present death, had not sent vs a great gale of winde at

hanging from the beams, which appears, from the inscription, to have been brought to Europe by the Danish Expedition of 1607." As, however, that Expedition never landed at all (see Introduction), the Kayak in question is probably one of those here alluded to

¹ Bruun has no entry for the 8th. "On the 9th", says he, "the Admiral and I, with some of our men, proceeded further up the harbour, in order to explore the country, which we did; and we saw their houses and how they bury each other, and returned on the same day to the ship. On the same day, we took five Greenlanders by force into Örnen." Lyschander mentions the setting on shore of the young man, who (he says) was at once torn to pieces by the natives.

² From the preceding, it is clear that they were not anchored in Rammel's (Amerdlok) Fjord, but in another close by, which can scarcely have been any other than Ikertok. When, nevertheless, Hall says that on setting out on their return journey they came out of Rammel's Fjord this may be explained in more than one way. The two fjords being connected by a sound, they may have sailed through this into Amerdlok Fjord; or they may have kept inside the small islands on issuing from Ikertok so far as to enter Rammel's Fjord, from which they may then have sailed out into the open sea; or, finally, Hall may have used "Rammel's Fjord" of the whole group of fjords between Holsteinborg and Itivdlek, which are all connected and may be considered as one bay partly filled up by islands.

South South-west,¹ whereby wee lay West North-west away, with a flawne sheat;² wee, doubling of the Ilands and Rocks, were forced to goe betweene certaine little Ilands which lye off Queene Sophias, Cape, foure leagues into the Sea; the which Ilands, I named the yeere before Knights Ilands, after the name of Iohn Knight.³ So, having passed these Ilands, not without great danger, wee found betweene them many blinde Rocks, and being cleere in the Sea.⁴

The thirteenth, at noone, we were in the latitude of

¹ That they may have been in great danger of being cast on the lee shore in issuing from Amerdlok Fjord with a strong wind from S.W. by S. is easily understood, but not how they could have been saved by a gale of S.S.W. wind, unless it be that at the critical moment they had almost reached the corner where the coast turns northerly towards Queen Sophia's Cape, so that a change of only a point in the direction of the wind sufficed for them to shoot clear of it.

² The term "a flowing sheet" is used when the sheets or clues of the principal sails are eased off so that the sails receive the wind more perpendicularly than when they are close-hauled, as when the wind is nearly at right-angles with the ship's course.

³ The name of Knight's Islands is often used of the whole "Skjærgaard" of small rocky islands to the W. of Holsteinborg, which is also called in Danish Holsteinborg Rev; but it applies properly only to the Kagsit Islands, which lie farthest to sea, very nearly at the distance here indicated by Hall. Knight's Islands are marked on Hall's general map (IVe).

⁴ Here the full stop is placed in the middle of an unfinished sentence, another instance of the rough manner in which Hall's text has been cut to pieces. In the portion cut out, referring to the 10th, 11th, and 12th of August, Hall most likely mentioned the circumstances that only Trost succeeded in getting to sea, in consequence of which she had to wait for her consort until the 12th or 13th. Lyschander mentions the fact, and appears to attribute it to Lindenow's superior seamanship. Bruun's entries are as follows: "On the 10th we weighed anchor and set sail, but when we came to the outermost rocks, the wind came up straight in our eyes, so that we were compelled to turn back into the harbour, but Trost came out to sea that same day." For the 11th, he has no entry, but he must have been lying in the fjord windbound. "On the 12th", he continues, "God helped us with a good wind, and

66 degrees 50 minutes, being off Cape Sophia, West and by North halfe westerly, about sixteene leagues.¹

The eighteenth, about foure in the morning, we got cleere off the Ice,² steering South and by West away, it being very thicke weather till noone, when it cleered vp; at which time, wee saw the shoare rising like Ilands, being very high and stretching South and by East and North and by West, about foure and twentie leagues, the shoare being beset all full with Ice, so that, in that place, it is impossible for any ship to come into the shoare. Also, of the Southermost of these two Capes,³ lay such a great banke of Ice, stretching into the Sea, that wee were forced to lye West and by North to double the same.

All this afternoone, wee were almost compast with Ice, we bearing to the same, the winde comming vp to the East South-east; we, standing South to the Ice, were forced to loose for one Iland, and to beare roome for another till about foure a clocke, when, by Gods helpe, wee got cleere off the same; the winde comming vp to the South-east and

as soon as it was day we weighed anchor and came out of the harbour and afterwards stood to sea. On the same day, we saw the first ice."

¹ Bruun's entry for this day is only the following: "On the 13th, we sailed out of sight of Greenland." Probably on that day the two vessels, having met, started off together on a westerly course, in the hope of finding clear water in the middle of Davis Strait.

As nothing has been said before in Hall's account, as it stands in Purchas, about troubles by ice (though Bruun mentions that ice was seen already on the 12th), it may be inferred that something has been left out referring to the intervening five days. Bruun's Journal also fails here, because his only entry between the 13th and the 26th is this: "On the 16th, one of my Greenlanders jumped overboard."

³ This expression also proves the abbreviator's carelessness, no "two capes" having been mentioned before in what we read in Purchas. Probably the capes of Queen Sophia and Queen Anne are meant, as they had evidently as yet made very little progress.

by South, wee lay South-west and by South of all this night.

The two and twentieth, thicke weather, the winde as before. This morning, about seuen a clocke, wee saw a saile West and by South of vs, we standing to him, for it was our Vice admirall the *Lion*, who had beene greatly troubled with the Ice, wee being glad to meete one another againe.¹

The eight and twentieth, about foure in the morning, the storme ceased,² the winde comming vp to the West South-west. About three a clocke, wee set our sailes, standing South-east away. But, being vnder saile, we spyed great bankes and Ilands of Ice to leeward of vs, lying off East and by South; which Ice I did iudge to lye

¹ It will have been observed that no mention has been made, either by Hall or by Bruun, of Löven or Gillibrandt since the 24th of June ; and; as there is no account of their having reached land at all, it seems that they never succeeded in doing so, but spent the time in vain attempts to get through the ice in a more southerly latitude. Bruun does not mention their meeting again with Löven, but he records their meeting with Gillibrandt, which is not mentioned in Hall's account as we have it in Purchas. "On the 26th," says Bruun, "Gillibrandt and On the same day, we saw Greenland again." Ornen came together. As he expressly says that Ornen fell in with Gillibrandt, it seems that the squadron had been rather scattered. Very likely, however, that may have been on purpose, as they would naturally look for the missing vessel, and this latter circumstance may-though it is not mentioned—in some measure account for their having spent 16 days (as it appears they did) in coming down from the neighbourhood of Holsteinborg to the southern extremity of Greenland.

² No storm having been mentioned before, this passage proves that the gap here observable between the 22nd and the 28th is caused by the abbreviation of Hall's narrative. Bruun does not mention it either, but says in his next entry after the 26th: "On the 30th, during the night, in a great storm, we were separated from *Gillibrandt*." There is no mention of her joining them again, but she probably did so, as she is known to have come home, and there is no mention of her returning alone.

off Cape Desolation, about eight leagues off; the which, by reason of the fogge, we could not see.

The nine and twentieth, about sixe in the morning, the winde came vp to the North-east and by North; we making saile, went South South-east away till noone with a stiffe gale, wee seeing in the morning pieces of drift Ice to windward of vs; hauing at noone a shrinke² of the same, I found vs in the latitude of 59 degrees 46 minutes, hauing from noone to noone made a South-east and by South way eight leagues.

The one and thirtieth, the winde continuing, wee holding still our course, with the winde still at North North-west, with faire and cleere weather, it blowing very much, so that wee stood away vnder a couple of courses low set, the Sea very much growne, being in the latitude of 59 degrees, 10 minutes, having made an East South-east way somewhat Easterly foure and thirtie leagues. This afternoone, after my observation, wee saw some Ilands of Ice, with some drift Ice, I something maruelling of the same, knowing, both by my account and my noones observation, that wee were shot too farre from any part of Groinland that was described in the Marine Chart; for the southermost part described therein is not in the latitude of 60 degrees,3 and we being now in the latitude of 59 degrees ten minutes, Cape Desolation bearing West North-west halfe Northerly, about sixtie foure leagues, and Cape Christian (which was the next known part of Groenland) North-west and by West westerly, eight and thirtie leagues; so, holding our course East South-east away, about foure a clocke, we had sight of Land, being very high Land, it lying alongst East

¹ See p. 7, note. ² See p. 55, note.

³ The meaning of this would seem to be that no part of Greenland reaches so far south as 60°; but he himself placed Cape Christian in 59° 50′, so there is clearly some confusion.

South-east, about sixteene leagues; the westermost paseemed either to fall away East North-east, and the southermost point bearing. East northerly fell away East and by North. This Land is very high, having the Hill covered with snow, the shoare being very thicke with Ica This place, because I knew not whether it was of the Mayn or an Iland, I named *Frost Iland*, after the name of the ship.¹

The first of September, at noone, I made observation and found vs in the latitude of 58 degrees, having made: South-east and by South way southerly sixe and twentic leagues. This day, at noone, I directed my course East and by South. This afternoone, about sixe a clocke, it fel calme, and so continued all the night following. This evening, I found the variation 10 degrees 50 minutes Northwesting.

The fourth day, the winde at East and by South, we lying South and by East, having a shrinke of the sunne² at about noone, I did suppose vs in the latitude of 57 degrees 20 minutes, having made a South-east and by South way southerly about ten leagues. All this day and the night following, we lay as before.

The eight day, faire weather, the winde as before, it

This passage is curious. No land lies in the direction indicated. What Hall saw must have been a cluster of icebergs and fog-banks. Luke Foxe, in 1635, expressed his belief that the land Hall saw (or thought he saw) must have been that he had previously named Cape Christian (see North-West Fox, p. 57, and Miller Christy's Voyages of Foxe and James, p. 95). It is strange, too, that Hall should have called it Trost Island, as he had previously bestowed that name on a locality in Greenland, and alluded to it under that name in the preceding account (see p. 47).

² Hall elsewhere has spoken of a "shrinke of the wind" (see pp. 52 and 75), and of a "shrinke of the land" (see p. 55). The meaning here evidently is that the sun became clouded over about noon, so that he could not get his usual midday observation, but had to be content with making a guess, as may be inferred from what follows.

being almost calme, wee going away as before, being at noone in the latitude of 58 degrees 36 minutes, having made an East North-east way northerly twentie leagues, by reason of the great southerly Sea. All this afternoone and the night following, it was for the most part calme. This evening, I found the Compasse varied about two degrees 45 minutes northwesting.

The ninth day, also, faire weather, the winde southerlye, a fresh gale, our course still East, being at noone in the latitude of 58 degrees 40 minutes, our way East and by North-easterly twelue leagues. This afternoone, the winde came vp to the South, or South and by East, with raine. This night, about midnight, thicke weather, with raine, the winde comming to the South-east, we lying East North-east and North-east and by East with the stemme.

The tenth day, about two in the morning, the winde came vp to the South South-west, wee steering our course East, being at noone in the latitude of 59 degrees 10 minutes, having made an East and by North way easterly foure and fortie leagues, wee having a fresh gale westerly. This day wee saw one of the Fowle the which are, on the Iland of *Bas* in *Scotland*, called *Bas Geese*. This evening, I found the variation I degree 4 minutes north-easting.

The eighteenth, this forenoone, about nine a clocke, wee espyed land, rising somewhat ragged, the Eastermost point of the same bearing South-east and by South, and the Westermost part South and by West, about eight leagues. These Ilands, by my account and observation,

¹ The Gannet or Solan Goose (Sula bassana) is still sometimes called the Bass Goose, from the fact that a very large colony breeds on the Bass Rock, in the Firth of Forth, whence also its scientific name.

I found to be the Ilands of Ferris, being at noone in the observation of 62 degrees 5 minutes.

The nineteenth, I set a little Rocke, called the Monke,² which lyeth off to the South-east end (it being about five a clocke), East South-east of vs, three leagues off. This night, about ten a clocke, it fell calme.

The twentieth, wee did see the streame had set vs to the Northwards. This streame setteth vnder the Ilands of Farre,³ next hand, East and West. So, casting about, wee stood to the westwards, lying West South-west, and sometimes West and by South, and sometimes South-west, it being very raynie weather.⁴ About midnight, it fell calme and so continued all night vnto the morning.⁵

¹ The Færö group. By analogy with the Færö near the coast of Scotland, which is called in English Fair Isle, the group in question ought to be called Fair Isles.

² The Monk is the southernmost islet of the Færö group.

^{*3} The Færö group again.

⁴ Apparently "west" has been five times substituted for "east" in this sentence, through a printer's error.

⁵ For the filling up of this gap, we have the following entries in Bruun's Journal, the only ones for the month of September:—

[&]quot;On the 16th, died my cook, by name Niels.

[&]quot;On the 21st, in the morning, we saw two or three islands surrounded by the sea, called Rona.

[&]quot;On the 26th we saw in the morning early Fule, and immediately afterwards the S. end of Hetland; the same day we sailed in the midst between Hetland and Færö, and towards night we sailed out of sight of them.

[&]quot;On the 27th, died one of my sailors, called Anders Jonsson.

[&]quot;On the 29th, we had sight of Norway, and were outside Ingren, six miles N. of Lindesnaes.

[&]quot;On the 30th, we first saw Jutland."

The islands called Rona are two small islets, Rona and Barra, N. of the Hebrides; Fule is Foula; "Ingren" is probably meant for Ekerö, outside the town of Ekersund, though that is rather farther from Lindisness than stated, even if Norwegian miles are meant. There is now in the district no place named Ingren.

The first of October, in the afternoone, about foure of the clocke, we had eight of *The Holmes*.¹ The second day, wee steered away South-east and by South and South South-east for *The Col*; and, about eight of the clocke this night, wee came into *Turco*, where wee rode all the day following. The third day, at night, the winde came to the North-east; so wee weighed and came into *Elsenor* Road. The fourth day, by the providence of God, we arrived in our desired Port of *Copen Hauen*, 1606.⁴

¹ The Holmes may be Erteholmene, at the entrance of the Kattegat, a short distance inside the Scaw. Bruun says: "October. On the 1st, we first had sight of Norway again", which would imply that they were tacking, as they would otherwise not have come near Norway again; and, if they did so very early, they might, going southwards, have sighted Erteholmene in the afternoon. At the same time, the vessels may have become separated during the last few days of the voyage.

² The Col means Kullen, which (being about 615 ft. high and isolated) is a landmark widely seen (see p. 55).

³ Turco is probably Torckow, a place on the N. side of the entrance of Skelderviken, a bay just N. of Kullen, where they might find an anchorage.

^{*} Bruun's Journal here differs somewhat from Hall's account, being to this effect: "On the second, we had sight of Skaane; the same night we anchored at Elsenore." Skaane is the province in which Kullen is situated; but Torckow is some 30 miles from Elsenore, which is not even visible from there. As neither Hall nor Bruun can be supposed to have made a mistake on this point, the explanation is no doubt this: that Bruun managed to reach the roadstead of Elsenore that night, but that the other vessels were embayed behind Kullen and obliged or preferred to stop and wait for a change of wind at Torckow, whither they would not otherwise have gone. Bruun then waited at Elsenore for the others to come up. "On the fourth", he says, "we sailed from Elsenore, and the same day we anchored before Copenhagen."

The severall burthens and numbers of men employed in the ships of the Fleet aforesaid were as followeth:—

The Trust, being Admirall, was of sixtic tunnes, had eight and fortic men. The Lion, Vice-admirall, was of seventic tunnes, had eight and fortic men. The Vrin, or Eagle, Reare-admirall, of one hundred tunnes, had fiftie men. The Gilliflowre was of fortic tunnes, had sixteene men. The Pinnasse called the Cat, was of twentic tunnes, had twelve men. Bredaransies Foord is most northerly.² Cunninghams Foord is next, in sixtic seven degrees and odde minutes. The Foord wherein they saw the Towne ten leagues up the same, is two leagues³ to the South of Cunninghams Foord. The Kings Foord is in sixtic sixe degrees and an halfe.

William Huntris, of Stowborow, in Yorke-shire, is Master

¹ As we have already explained in the Introduction, this note was probably not penned by Hall, but by Purchas. At the same time, the facts mentioned have no doubt been culled from Hall's unabbreviated narrative, though, as it appears, without much care.

² This reference to Brade Ranson's Fjord is very remarkable, because it is mentioned nowhere in Hall's accounts of his voyages, though it is shown on his maps, it having been visited by him on his expedition in the pinnace in 1605 (see pp. 12 and 38). One of two things must be the case: either Hall's unabbreviated narrative must have contained some reference to this fjord, or else Purchas (or whomer made the abbreviation and penned this note) must have had the maps before him. The first is most improbable, considering the close agreement between the "Report to the King" and Hall's account of the first voyage, especially with regard to the omission of all information relating to that expedition. It seems, therefore, to follow that the writer of this note must have had the maps (see Introduction).

³ This is of course erroneous. Most likely the statement here reproduced was to the effect that the distance was 12 leagues, which is the distance given by Baffin (see *post*) between Cunningham Fjord and Ramels Fjord, which is close to Fos Bay.

Hall his man, and is allowed thirtie pound by the yeere of the King of Denmarke for his skill in Nauigation.

[The brief reference to the third Danish Expedition to Greenland in 1607, which is found following the account of the Second Voyage in 1606 in "Purchas his Pilgrimes" (vol. iii, p. 827), has been reproduced and discussed in the Introduction.]

According to Mr. Clements R. Markham (Voyages of William Baffin, p. 27n), Stowborow is most likely an error for Scarborough. The present tense "is", is rather remarkable, and seems to have been carried bodily over from the document from which the statement is quoted. Nothing is known from any other source about this grant to Huntriss. The matter is in itself unlikely, and the sum is so large for that time (being the average pay of a captain) that there must be some mistake. Perhaps on some occasion when Huntriss exhibited his dexterity in handling a boat, or something similar, the King may have given him a gratuity of 30 Rix dollars.

An Account of the English Expedition to Greenland, under the Command of Captain James Hall, in 1612.1

By JOHN GATONBE, Quartermaster.2

[From Churchill's COLLECTION OF VOYAGES AND TRAVELS, vol. vi (London, 1732), pp. 241-251.]

A Voyage into the North-West Passage, undertaken in the year 1612,3

By the Merchants Adventurers of London, Sir George Lancaster, Sir Thomas Smith, Mr. Ball, Mr. Cocken, and Mr. James Hall, being Venturer with them, and General of both the ships.

To the Right Worshipfull Sir Christopher Hilyeards, Knt.8

John Gatonbe wishethe in this life the contynvance of health and prosperitie, with great increase of worship, and everlasting felicitie in Christ our Saviour.

PURPOSING with myselfe to present this journall, or travisbook, to you, which is vssally kept of seafayringe men and mariners, in their navigation of long voyagies and unknowne

¹ We have allowed this (the usually accepted) date to stand throughout, although we have, in the Introduction, given reasons for believing that the voyage really was made in the year 1613.

² Gatonbe (of whom a notice will be found in the Introduction) held the post of Quartermaster on board the *Patience*; but, after

countryes; and having been lett10 thes two yeares, being travelling upon the sea to mayntayne my poore estat of wife

Hall's death, he became master's mate of the *Heart's Ease*. As stated in the Introduction, we have omitted the map accompanying Gatonbe's narrative.

- ³ This is the heading in Churchill's *Voyages*. It may be attributed either to Gatonbe (1615), or to the Editor (1732). The voyage had no connection with the search for a North-west Passage, as we now understand the term. Its object was to make search in Greenland for mineral ores and other native wealth (see Introduction). It may be the heading is Gatonbe's, and that he considered Davis Strait (to which the voyage was made) to be a North-west Passage—or, rather, the commencement of one: otherwise the heading is meaningless and incorrect.
- ⁴ Sir James (not Sir George) Lancaster commanded the first voyage of the East India Company, and was knighted on his return in 1603. He died unmarried in 1618. For further information concerning him, see Mr. Clements R. Markham's Voyages of Sir James Lancaster (Hakluyt Society, 1877), and his Voyages of William Baffin (Hakluyt Society, 1881).
- ⁵ Sir Thomas Smith, the leading merchant prince of his day, was the first Governor of the East India Company, and an active member of most of the great foreign chartered trading companies of the time. He died in 1625. A good account of him is to be found in Mr. Markham's Voyage of William Baffin, pp. i-ix.
- ⁶ Richard Ball, an eminent London merchant, who did much to extend both commerce and geographical knowledge, died about 1620. A notice of him is given in Mr. Markham's Voyages of William Baffin, p. 3.
- ⁷ Alderman William Cockayne (or Cocken), of London, another eminent and wealthy merchant, was Lord Mayor in 1619-20. He was one of the first "Committees" (or Directors) of the East India Company, and "Richard Cockain and Co." contributed the largest single amount subscribed on behalf of the first voyage of that Company. Rundall says (but on what authority we know not) that Alderman Cockayne had been the prime mover in the sending out of Hall (*Voyages towards the North-West*, p. 91). He died in 1626. A sketch of his life is also given by Mr. Markham.
- ⁸ Sir Christopher Hildyard (or Hilyeards), of Winestead, near Hull, was a member of an ancient and well-known East Riding family, long seated in Holderness. He became a Member of Parliament, and died in 1634. A notice of him will be found in Mr. Markham's work abovementioned. He does not appear to have been an "adventurer" in the voyage.

and children; and, this winter, being at home, and remembring the manyfold curtesies shewed by you to my anciente father, Nicholas Gatonbe, I thought good this simple labour, such as it is, to offer unto you, right worshipful, desiring you to accept it, as a gift that procedeth from such a one who hartily wisheth you well, and would, if ability served, present you with a better, seeing and knowing your worship and your ancesters have been alwayes well-wishers to this towne and the inhabitants of the same; wherefor I intreat your worship to peruse it over.

And, First, you shall see the setting out of our voyage, what adventures we had with our generall.

Secondly. The tym of our saylling.

Thirdly. Our travis upon the sea, with the windes and weyther we had.

Fourthly. The height of the poll observed.

Fifthly. The ice we saylled by, with the coldnes of the aire.

Sixthly. The barrenness of the country, with huge mountayns lying full of snow.

Seventhly. The nature and conditions of the inhabitants and salvages of the same.

Eighthly. The thinges we bought of them for old iron, with that which happened unto vs in the countrye.

Lastly. Of our returne homeward and our safe arrivall.

Thus, craving both pardon for my boldnes, and also re-

[&]quot;(From p. 82.) To this dedication, the editor of the sixth volume of Churchill's Voyages and Travels appends the following note:—"We have preserved the spelling of this dedication as a specimen of the orthography of the time; but we thought it proper, for the sake of the generality of our readers, to accommodate the spelling of the piece itself to the modern way, especially as there was no method observed by the writer."

^{10 (}From p. 83.) This old term (meaning, of course, "hindered" or "prevented") is now seldom used except in legal phraseology.

questing your favorable accepting of my simple travell, I cease from further troubling your worship with my rudnes, praying Gode to inriche you with the plentyfull increase of the gifts of his spirite.

From the poore house of John Gatonbe, this 25th day of Februarie, 1615.



HE 10th of *April*, being *Good Friday*, we haled both our ships into *Hull* road, the one being of the burden of 140 tons, called the *Patience*, we being 40 men and boys in her; the other of 60 tons, called the *Heart's-Ease*, con-

taining 20 men and boys. This day, we cross'd both our yards and entred into pay, making fit to take the first wind to sail withal.

Monday, April 20, we set sail in Hull road, the wind at E.S.E., and bore down to Cleeness¹ and anchor'd; and, towards night, the wind came to the N.E., and so we return'd into Paul² road again this night, being much wind.

- 21. This day, the wind came to S.S.W:, and so at night we went over and rode at the *Ness*, our pinnace being about business at the town.
- 22. This day, being Wednesday, we weigh'd and set sail, the wind at S.S.W., and came out of Humber at 12 o'clock at noon, going our course N. and by W.
 - 23. This day, the wind southerly, we going the same

¹ Cleeness is on the Lincolnshire coast, near Great Grimsby, and in the parish of Clee.

² Paul Road was no doubt that part of the Humber opposite the Parish of Paull, or Paghill, five miles S.E. from Hull, and on the Northern, or Yorkshire, shore.

course, being seven leagues off *Whitby* at noon; and, at six o'clock at night, we were 9 leagues of *Hunclife*,¹ it bearing from us S.S.W., we sailing N.N.W.

- 24. This day, the wind at E.S.E. and very fair weather, we being some 12 leagues off *Stabs-head*,² it bearing W.S.W. from us. At noon we observ'd the sun, and found the altitude of the pole to be 56° 12′.
- 25. This day, the wind at S.E., we sailing N.N.W.; and, at 9 o'clock in the morning, we spake with north-sea fishermen, and had fresh fish of them, they belonging to *Yarmouth*, being from *Bohomness*³ W.S.W., 9 leagues off, the pole being rais'd 58° 30'.
- 26. This day, being Sunday, the wind southerly, we sail'd betwixt Orkney and Fair Ile and Foullay, leaving the islands and Shetland off our starboard side, at 3 o'clock in the morning; and at 6 o'clock we sail'd W. and by N. to the sea, Foullay bearing from us N.E., 5 leagues off; and at noon the wind came southerly, we sailing then W. This day, at night, the wind came contrary, to the S.W., we sailing to the northward N.W.

Fair-Isle sheweth thus 2 leagues off.

Foullay sheweth thus 3 leagues off.





After we parted from these two Islands, we had sight of no other land till we came to sight of Greenland.

- 27. This day, we had much wind at N.W., being forc'd to take in our topsails for our vice-admiral, she being a-stern of us, we sailing W.N.W.; and, at four o'clock at night, we tack'd about to the southward, we sailing S.W. and by S., the wind coming to the W. and by S.
 - 28. This day the wind came to the N.W. with cloudy

¹ Huntcliff, near Redcar. ² St. Abb's Head.

³ Buchan Ness, the most easterly point of Aberdeenshire.

weather. This day, at 6 o'clock in the morning, we tack'd about to the southward, sailing W.S.W.; and at noon we did observe the sun, and found the altitude of the pole to be 59° 47′.

- 29. This day, the wind at N.W., we standing to the southward W.S.W., being thick hazy weather.
- 30. This day, calm and misty from 12 o'clock to 6 o'clock in the morning; then the wind came to the S.W., we sailing all the day after W. and by N.

May I, being Friday, the wind at W.S.W., we sailing to the northward, N.W. and by N., being misty and much wind; and at noon it cleared up, and we did observe the sun, and found the pole rais'd 61° 31′, we tacking about to the southward, wending S. and by W., having fair weather; and at 8 o'clock at night we tack'd about and stood to the northward, wending N.N.W.

- 2. This day, stormy weather, with the wind at S.W. and by W., being misty and rain, we standing to the northward N.W. and by W.; and at 10 o'clock it fell little wind and calm; and the wind ran to the N.E., we sailing our course W., having a fresh gale of wind at noon.
- 3. This day we had fair weather, the wind at E.S.E., we sailing W. This day we did observe the sun, and found the pole to be rais'd 61° 46′; and at 4 o'clock at night the wind came contrary, being westerly, we standing to the northward N.N.W.; and at 6 o'clock we stood to the southward again.
- 4. This day, the wind at N.W., we sailing W.S.W.; and at 5 o'clock our vice-admiral sprung her fore-mast, whereby she was forc'd to take in her top-sails and fore-sails; and so did we in the admiral, till such time as they had fish'd it and made it strong.¹ This day, at noon, we did observe

¹ To "fish" a spar which has been sprung is to strengthen it by applying to it "fishes", or flat pieces of wood, which are placed on

the sun, and found the pole rais'd 61° 8', the wind being come to N.N.E., we sailing our course W.

- 5. This day, the wind came to W. and by S., and began to blow, we standing to the northward N.W. and by N.
- 6. This day, the wind at W.; and at 6 o'clock in the morning the wind came to N. and by W.; and so we steer hence W., the altitude of the pole being 61° 36'.
- 7. This day, the wind at N.W. and by N., we sailing W. and by S.; and at 2 o'clock in the afternoon it came up to the N.E., being cloudy and thick, which turn'd to much rain, we sailing our course west.
- 8. This day, much wind and rain at E.N.E., we sailing W.; and at noon we had fair weather, the wind being come to the N. This day we hoped to see *Friesland*, yet did not.
- 9. This day, the wind at N.N.E., stormy weather, we sailing our course W.; and at noon it grew fair, and we observ'd the sun and found the altitude of the pole to be 59°.51′. This day our master found by his instrument the compass varied 15°. to the westward of the north, the occasion we had no sight of *Friesland*, sailing to the southward some 12 leagues; so that for our west course we kept, we had made but a W. and by S. way; yet I suppose it to be the current which doth set to the southwestward, and so doth set from the westermost part of *Friesland* into the N.W. Passage.²

each side of it and secured by being "woulded", or wound round and round with pieces of rope.

¹ The existence of Frisland (an imaginary island taken from the Zeno Chart and shown on most of the Atlantic Charts of the period) was, of course, fully believed in by Hall and his contemporaries.

² As regards this current, those who are acquainted with the accounts of voyages to the North of America in the early part of the sixteenth century are well aware that, in estimating the probability of the existence of a North-west passage, or the neighbourhood in which it would be found, the navigators and geographers of that time were mainly influenced by consideration of the currents of the sea and the set of the tides. In 1612, many believed that the passage practically

- N.; and at noon we observ'd the sun and found the altitude of the pole to be 60° 4′, being very fair weather.
- 11. The wind N., and at noon we sounded, and had no ground of 150 fathom, it being little wind and calm, sometimes southerly, and sometimes at S.W., sometimes easterly; thus it did continue variable all the day, being fair weather and smooth sea, we sailing for the most part W. and by S.
- 12. This day, calm; and at 4 o'clock in the morning the wind came to E.N.E., we sailing W. and by N. This day the water changed of a blackish colour; also we saw many whales and grampus's.
- 13. The wind at E., we sailing W. and by N. This day, being hazy, we met with ice, the wind being come to N.N.E. Much wind and snow at 9 o'clock at night, so that we were forc'd to take in our sails and stand with our foresail to the castward, wending E. Also, some of our men spied land, yet we could not well discern it, it snowing so fast.
- 14. We stood in with the land again at 2 o'clock in the morning, wending N.N.W., and had sight of land betwixt 5 and 6 o'clock in the morning; and our master made it Cape Farewel, so called by Captain Davids at the first find-

The land did rise thus full of snow. The cape 7 leagues off, N.N.W.



This land is the southernmost point in Greenland, the heighth of the pole there being 59° 15'.1

ing of the country in anno 1585, because he could not come

had been found by Hudson, and spoke of it accordingly, as Gatonbe here does, meaning probably Hudson's Strait, or possibly Davis Strait.

This is probably a misprint for "59" 51", which is much more nearly correct.

near the land by 6 or 7 leagues for ice; it bearing from us N.N.W., and we sailing along by the ice W.N.W. all the day.

- 15. The wind at N.N.W., sailing W.; and at 4 o'clock in the morning we tack'd about again to the ice, again sailing N.N.E.; and at 10 o'clock in the morning we tack'd about again, being hard aboard the ice, having sight of the land, it stretching more to the northward. The ice lieth all along it, being as it were a great bay betwixt two head lands.
- 16. This day, a cold hazy wind, it being at N.N.W., we sailing W.; and at 7 o'clock in the morning we tack'd about, lying N.E. and by N., and at 2 o'clock we met with ice again; we, lying to and fro, hoisted our shallop out, and, espying seals lying upon the ice, our shallop rowed to them and killed one of them; the rest tumbled into the water, being 20 in a company. This day, we observ'd the sun and found the altitude of the pole to be 59° 30', we being some 70 leagues within the streights, it being 115 leagues

¹ As far as we are aware, this passage is the earliest written statement to the effect that Cape Farewell was so named by Davis. The name is not mentioned in any account of Davis's voyages, nor does it occur on any map of earlier date than that of Hessel Gerritsz, If this map is, as is generally supposed, in published in 1612. the main, a reproduction of Hudson's, it is most probably to him that the delineation of the coast of Greenland, and the insertion of Cape Farewell, is due; but, in any case, the latter must rest on some, till then, unwritten tradition. If Davis did so name this promontory, it is strange that the name does not occur on the Molyneux globe or on the Molyneux map in Hakluyt's work; but this may be owing to the circumstance that on these Frobisher's Strait and the localities about it are placed in the southern extremity of Greenland. When the original author of Gerritsz's map had moved them up to the latitudes assigned to them by Frobisher, the Southern extremity of Greenland could be drawn properly, and Cape Farewell put in its proper place (see the Introduction and page 7, n.).

between the coast of America and Greenland in the entrance of this passage.¹

- 17. The wind at S. in the morning, we sailing N.W. This day we run among the ice, and were inclosed with the ice, so that we could get no passage to the northward; and so we were forc'd to stand out again, and were glad that God had deliver'd us from amongst it; it being 4 o'clock in the afternoon before we were clear of the ice, sailing S.W. to the sea. This day, being Sunday, we had sight of the land called Desolation,² it being from us 15 leagues N. and by E.
- 18. This day, at one o'clock in the morning, we had much wind and snow, the wind being westerly; and at six o'clock in the morning it prov'd fair weather. We, tacking about into the shore, did wend N. and by W., which did³ near the land of *Desolation*; and at noon we tack'd about and stood back again, being ten leagues from the land, it bearing N.N.E. of us. The ice hindering of us this day, we did observe the sun, and found the pole 59° 53'.
- 19. The wind southerly, we sailing for the most part N.W. by N. and N.N.W. Then the land of *Desolation*

Cape Desolation rises thus, 15 leagues off, N.E. by N.

The land of Desolation riscs thus, 12 leagues off, N.E. by E.





This land so called by Captain Davids, it being so desolate and comfortless, with huge mountains of snow lying upon it, such as he has never seen, nor any of his men before him.

¹ By "this passage" Gatonbe refers, of course, to Davis Strait; but there must be some mistake in the figures here given, as they cannot be made to agree. Gatonbe's leagues are very uncertain quantities, as appears from not a few other passages in his narrative.

² Davis, in 1585, named the south-western part of Greenland "the Land of Desolation" (see page 7, n.).

³ Query, "bring us" omitted.

did bear off us N.E. and by E. This day we did meet with great islands of ice. This day we did observe the sun, and found the altitude of the pole to be 60° 35': also we had a forceable current, which we went along the coast with till we came to bring *Desolation* point E. of us. This current set from *Desolation* into *America* side, and into *Hudson's* streights, being so called by his men, they leaving him behind them in that country, which was his death, in the year 1611.

20. This day, the wind at N. and by E., we sailing E. and by N. to the land, which we had no sight of as this day. This day we did observe the sun, and found the altitude of the pole to be 61° 33', being to the northward of *Desolation* some 30 leagues. This day we stood to the westward; and at 10 o'clock at night we stood to the eastward, again meeting ice.

21. The wind at N.E. and by E. This day we had sight of land at 2 o'clock in the morning; and our master mate,



Cape Comfort rises thus, the heighth of the pole being 62° 33', the smoothest iand and best to look to of all the country of Greenland; yet we could not come near it for ice.

John Hemslay, and I called it the land of Comfort.² And we call'd up our men, and tack'd about our ships, the ice

¹ This is, of course, a mere surmise. It shows how much men's minds were at the time impressed by Hudson's discoveries.

² The indications here given are scarcely sufficient to identify the locality with any certainty, unless the sketch is so true to nature as to be recognised on the spot—a matter as to which we have no means of judging. It is described as the best land to look at of all the country of Greenland; but, in the latitude indicated (62° 33'), the inland ice approaches nearer to the coast than almost anywhere in South Greenland, and presents a wider front to the west than anywhere else.

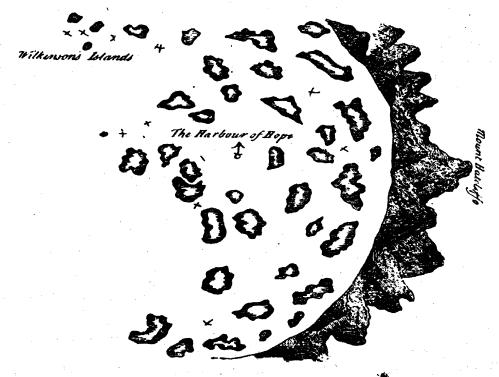
hindering us from coming near the land, we sailing along the land N., and N. and by W., being distant from it 7 leagues. And, at noon, we being near the ice, our men went with the shallop to it, and killed four seals, and brought other two aboard quick, we having good sport betwixt them and our mastiff dogs.

- 22. The wind at N. and by E. This day we turn'd amongst the ice, meeting with many islands of ice, which were very high, like great mountains: some of them, we judg'd to be 30 yards from the water, fleeting upon the seas, being 15 leagues off the land. This day we had sight of the land, yet could not come near it for ice. This day we did observe the sun, and found the pole rais'd 62° 55'.
- 23. The wind at N.N.W. This [day], being calm, at noon, we sounded with our lead, and had no ground of 180 fathom, being some 110 leagues within the passage. This day we found the altitude of the pole to be 63°,2 sailing N.E. and by E. in with the land.
- 24. This day the wind at N. and by E., we sailing N.W. and by W., being thick cloudy weather; and at 8 o'clock in the morning we tack'd about to the eastward, it being little wind and sometimes calm.
- 25. This day, calm, with little wind and variable; sometimes at N., sometimes at N.W., we sailing for the most part N.E. and by E. This day we sounded by an island of ice with our shallop, and found no ground of 150 fathom, being off the land 21 leagues; and at 10 o'clock at night it was thick and misty weather, so that one ship could not see the other.

By "islands" or "mountains" of ice, he of course means icebergs, which abound in Davis Strait.

² If they were really 110 leagues within Davis Strait, it would seem as if they must have been much further north than, according to this statement, they appear to have been.

26. This day, the wind at N., we sailing E.N.E., sailing in with land, being very thick and misty weather; and at 2 o'clock in the afternoon it clear'd up, and we saw the land, being some three leagues from it, it seeming as tho' we were hard by it, being a very high land, having much snow lying upon it. Also, two of the savages came rowing to our ships in their boats, we sailing in still with the land,



sounding, and having with our lead and line 25 fathom, sometimes 20, 18, 15, 12 fathom, it being rocky ground, coming amongst many dry rocks and islands. This day we look'd for a harbour with our shallops, for the ships to ride in safety, and found one which our general call'd the harbour of Hope; for here we came to land with our ships; the which we could not come near [during] the time we sail'd along the land, from the sight of Cape Farewel until we came to this place.

- 27. The 27th day, we harboured in the harbour of *Hope* (the islands we call'd *Wilkinson* islands: the mountain we call'd *Mount Hatclife*)¹ at 2 o'clock in the morning, praising our God for our safe arrival in this unknown country, having been from home 5 weeks and 2 days.
- 28. The 28th day, our general found a convenient place to land the quarters of our pinnace for our carpenters to set together, it being an island hard by our ships. This day, also, our general caused our ship's boat to be mann'd, and our shallop, and went himself to discover the country



The fashion of the salvages rowing in their boats, the boats being made of seal skins, and clos'd in, all but the place where he rows in her, and that is clos'd about him when he sits in her, from his waste downward. His oar hath two webs, and he useth both hands to row with.

and what rivers he could find in the main; the savages

¹ Hall's Harbour of Hope (which is stated on pp. 99 and 111 to have been in 64° lat.) was no doubt amongst the islands off the Fjords of Godthaab (Good Hope), so called from the trading station of that name which is situated there. Davis, in 1585, had named the same locality Gilbert Sound. The small islands cluster here very thickly, the name apparently applying principally to the northern portion of them. The bay from which Godthaab Fjords enter is surrounded by lofty mountains, one of which must be Mount Hatcliffe, very likely the Kingigtorsuak (Hjortetakken, 3,760 ft.). Mr. Markham suggests (Voyages of W. Baffin, p. 12, n. 2) that Hatcliff may be a misprint for Huntcliffe, a point on the Yorkshire coast (see pp. 86 and 118), and that it was so named from some fancied resemblance. Wilkinson's Islands were, doubtless, named after a Mr. Wilkinson who was with the expedition as merchant or "doer" for the "adventurers" who had sent it out (see pp. 98, 107, 109, and 126). One of the islands in the vicinity (Imerigsok) is still called the Island of Hope; but whether or not this name was derived from the Harbour of Hope, we cannot say.

rowing to and fro to our ships, holding up their hands to the sun, and clapping them on their breasts, and crying, Elyot, which is as much to say, in English, Are we friends? thus saluting us in this manner every time they came to us, and we offering the same courtesy to them, making them the more bold to come to our ships, they bringing with them sealskins, and pieces of unicorn horn, with other trifles, which they did barter with us for old iron.

29, 30, 31. These days our carpenters made haste with our great pinnace to get her down, the weather being fair, and the wind for the most part easterly; for our general was minded to make what speed he could for to sail along the coast further to the northward, being as yet not come to the place where he was at afore by 70 leagues.²

June 1. Our general return'd aboard again,³ having found two rivers in the main; the one he call'd Lancaster river: the other, Ball river;⁴ for Greenland is like Norway, having many islands and rocks along the main.

2. Our master and Mr. Barker,5 master of the Vice

¹ Probably a misprint for "done", meaning "finished".

^{*} The southernmost locality visited in the previous voyages was the Itivdlek Fjord (King Christian's Fjord), about 54 leagues north of Godthaab, where they now were lying.

³ Hall had been absent in the ship's boat since the 28th (see p. 95).

Lancaster River is probably the southernmost of the fjords, called in Greenlandish "Ameralik". It was to the head of this fjord that Nansen and his party descended in September 1889, after their memorable journey across Greenland from the east coast. The northern fjord is generally called "Godthaab Fjord", but a part of it at any rate has retained Hall's name, Ball's River, with the difference that in Danish it is generally written Baal's River, or Rivier, the spelling Baal expressing in Danish the English pronunciation of Ball. In Greenlandish, it is called "Kangersunek". Lancaster River and Ball's River were, of course, named after two of Hall's "Adventurers" (see p. 82).

⁵ Andrew Barker was a seaman of good repute in Hull, where (as mentioned elsewhere) he had held the office of Warden of the Trinity. House. After Hall's death, on July 23rd, Barker succeeded him as Admiral, as will be found related further on (see also Introduction).

Admiral, went in the shallop and rowed amongst the islands, and to one of the rivers where they were afore, having their fowling-pieces with them to shoot fowl with, which that country affordeth small store.

- 3. This day, we employ'd ourselves in searching the country, which affordeth nothing as yet for the profit of our voyage.
- 4. At night, one of the savages stole a musket from our men which kept the island where our great pinnace was set up; they keeping a bad watch, and leaving their musket where they kept centry, being at the fire in the coy,¹ the weather being cold, it was taken away by one of the wild men, they could not tell when. The cause of our watching was for that the savages will steal all things they can come by, but chiefly iron.
- 5. This day we launch'd our great pinnace, which our general call'd the Better Hope. This day, also, James Pullay catching hold of one of the salvages, another did cast a dart at him, and struck him into the body with it, on the left side, which gave him his death's wound. Also the salvage he took, we haul'd into the ship; and by him we had our musket again; for two of the salvages, being aged men and rulers of the rest, came, with great reverence, to know the occasion we had taken one of their men. We, with signs and other tokens, did shew them the occasion, being the best language we all had amongst us, delivering their man, his boat, oar, and darts. Our general gave unto him a coat, a knife, and a seeing-glass

This word does not appear to be now in use in English, nor can we even trace it as an obsolete provincialism. It is, doubtless, the same as the Dutch *Kooi*, which signifies a confined place, such as a beehive, a shed, a shelter for cattle, or a bunk or sleeping-place on board ship. In the latter sense, it is used in Danish, in the form of *Köie*. "Coy" may, therefore, be taken as indicating some sort of shelter which they had constructed on the island.

also, to requite the injury we had done; yet he, with a frowning look, desiring to be gone from us, we let him go out of the ship, and, helping him into the chains, he leapt over-board, and the other two did help him ashore; and, when he was ashore, the salvages cut off the coat our master gave him from his back, so little did they regard it. It was made of yellow cotton, with red gards¹ of other cotton about it.

- 6. James Pulley departed this life, to the mercy of God, at three o'clock in the morning, and we bury'd him at noon upon one of the islands we rode by. This day, also, we carry'd the quarters of Mr. Barker's small shallop to be set together by the carpenters ashore, that we might have our shallops ready to go with us along to the northwards.
- 7, 8, 9. Rainy weather: otherwise our shallop had been done and we gone from hence to the northwards.
- 10. The shallop was done and launched this day. Mr. Hall, being general of both the ships, did hold a parley with all the company of both ships, strictly commanding that none of us should barter for anything, but Mr. Wilkinson (who was merchant for the venturers) and them that were appointed by the merchant, in pain of forfeiting their wages; which articles were wisely answer'd by the officers of the ships.
- 11. We cross'd our yards and got an anchor home, but the wind came contrary, spending our time in rowing from island to island; and the salvages came to and fro to our ships, bringing us fresh fish, which we bought for iron nails.
- 13. One of the salvages brought two young seals, which he had kill'd at sea, and our master bought them, and we haul'd them into the ship, we wondering he could kill them at sea, it blowing so much wind at S.W.

¹ Facings or trimmings (Nares).

- 14. This day, being Sunday, we came out with the wind N.N.E., and the salvages rowed to us, being 6 leagues off the land, into the sea; and for that our captain gave one of them a knife. This day we observed the sun, and found the pole's altitude to be 64°, being the height of the place we came out of, being the harbour Hope. Wilkinson's islands and mount Hatcliff we rowed under, they bearing off us E.
- 15. The wind at E.S.E., we sailing along the land to the northward, N. by E., being fair weather.
- 16. The wind at N. by W., we sailing into the shore N.E. by E. This day, Mr. Hall and Mr. Barker took their shallops, being well mann'd, and rowed into the land to discover the country and to see what traffick they could have with salvages. This day, lying off and on with our ships, they being ashore with the shallops, the wind came out of the sea, and we stood of, sailing N.N.W. The wind being come to west, and the vice-admiral following of us, struck on a blind rock, and took no harm, praised be God! our shallops not coming to us till we were 5 or 6 leagues off the land.
- 17. The wind at S.E., we sailing along the land to the northward N. by E. This day, being *Wednesday*, we row'd with both our shallops into the land, and sounded the harbour we anchor'd in, being the second harbour we came in.⁸

¹ That is, out of the Harbour of Hope (probably the roadstead off the entrance to Godthaab and Ameralik Fjords).

² Query, "rode".

³ As appears from Gatonbe's entry for August 9th, when they returned to his place, this locality was called by Hall "Cockenford", in honour of Mr. Cockayne, one of the Adventurers. Baffin, who calls it Cockin's Ford or Sound, states (see p. 123) that the latitude was 65° 20′, which is that of the Southern Isortok, a large fjord a little to the S. of the present colony of Sukkertoppen, but we have no means of more certain identification.

- 18. At 8 o'clock at night we had a sore storm off the land at S.E., with such mighty whirl-winds, which came from the mountains that all our cables we had being new ones we bent to our great anchor, and let it fall to keep us from the rocks.
- 19. In the morning, we broke one of our cables, and we rode by our great anchor, having much wind and rain.
- 20. The weather faired, and our general caused our great pinnace to be made ready, and to row along the coast, he going with us himself, we being in her 22 men and boys. This day we rowed some 4 leagues, and came to a great island, and anchor'd there 3 hours; and from thence we went into a river lying E. by N. up the river.
- 21. We rowed up the river still, and we found nothing in it for any profit, rowing some 3 leagues into it, the ice stopping that we could get no further.
- 22. We, being lett by ice, return'd and rowed out again; and the salvages follow'd and row'd after us, and so along with us, intending to do us some harm; for, when we came near any island, they did throw stones at us with their slings.
- 23. The wind at N.N.W., and we row'd amongst the islands to the northward, and so came to a great river, which troubled us to row over, there went such a forceable tide of flood, it being within a league of *Queen Anne Cape*,

¹ It should be noted that what follows, up to the 29th (a period of nine days), recounts the incidents of the trip northwards, along the coast, which Hall (accompanied, apparently, by Gatonbe, among others) undertook in the newly-built pinnace Better Hope, in order to make further discoveries.

This island was probably that of Sermersut, which is the largest island on this part of the coast, and is situated 65° 30′ and 65° 35′. In Danish, the island is called "Hamborgerland", because it used to be a rendez-vous of whalers from Hamburg.

^{3.} The river was, doubtless, the Kangerdlugssuatsiak.

and came to an island, and rested us there till the flood was done; and then we rowed about the cape and came to an island, whereon was a warlock, and rowed into it and found it a good harbour for ships. This day we rowed into a river, as we supposed, but found it to be a bay, we being leagues to the northward of the cape. This day our men went ashore and kill'd 6 partridges, and spy'd in a valley wild deer; yet, as soon as they did see us, they did run away as fast as their feet could carry them.

24. We row'd out again, and so along the land. This day we came to a mountain, where we rowed to it amongst the islands, taking it for a river our master had been at afore, yet it was not. The mount we call'd *Gabriel* mount.³

³ Of course it was Mt. Cunningham they supposed that they had described. The land between Kaugerdluarsuksuak and the Itivdlek Fjord is described by Capt. Jensen as a high alpine tract, and several peaks

¹ See p. 46, n.

² The great river which they had so much trouble in crossing on account of the strong current caused by the flood tide, cannot have been any other than the great Kangerdlugsuak (in Danish called "Söndre Ström Fjord"), which at the outfall divides into two branches, enclosing the island of Simiutak. Having with much labour crossed the southern branch, which is much the larger, they rested on Simiutak till the flood was spent, when they crossed the northern arm and rounded Queen Ann's Cape, formed by the mountain of Kingatsiak. The southern arm of S. Ström Fjord is in 66°, and the cape in 66° 7' The supposed river up which they rowed 3 leagues was the Kangerdluarsuksuak, which opens into Davis's Strait in about 66° 12'. Gatonbe's estimates of distances rowed are rather liberal all through. the entrance of the last-named fjord are several islands, but on which of them they saw the warlock we have no means of guessing. Lyschander, and Bielke, state that on the voyages of 1605-1606 Varder were set up for the information of future visitors wherever good anchorage was found; but, in Hall's accounts, there is no mention of any beacon having been set up here for that purpose, nor of Hall Probably the place himself having explored the coast so far S. had been examined and the warlock set up by a party from the Trost during Hall's absence to the North from June 20th to July 7th, 1605.

- 25. We row'd from thence to an island which lieth two leagues off the land, with many broken rocks about it, that stretch from the main, and so to the sea-board; and there we rested all that day, the wind blowing very much at N., it being against us. This island our master call'd by the name of *Throughgood* island. Here we got great store of mussels, being of a great bigness. Here one of our men killed a fox with a fowling-piece, [there] being many in this island that run from the main and feed upon fish they get off the island.
- 26. It being very fair weather, we row'd from thence amongst many broken rocks, and so along the land; and at noon we came to the river our master had been at afore, he naming it the King's-ford.² There is a mount he named Cunningham mount. We had traffick with the salvages; and at night we anchor'd in a haven on the south-side of the river, call'd Denmark haven,³ there being in the entrance 40 fathom deep, and had traffick with the salvages for seal skins and some salmon trout.

exceed 3,000 ft. in height. One of these, Hall seems to have taken for Mt. Cunningham, but there are no means of guessing with any certainty which it may have been. Of the origin of the name Gabriel Mount we can offer no explanation.

¹ Throughgood Island is, doubtless, the Umanarsugsuak of the local Greenlanders, though the distance from the shore is nearer two miles than two leagues. It was probably called so by Hall, not as some might think on account of being so very good, but from some person bearing this name, which (like some other similar ones) is not uncommon in the Scandinavian Settlements in England. The meaning of it is "Thor's priest."

² King's Ford is, as we have stated before (see p. 10, n.), the Itivdlek Fjord. The sketch of the coast is taken from a point further to the south than Hall's in the Report to the King of Denmark (see p. 9), in consequence of which Mt. Cunningham does not here present that appearance like a sugar loaf which is so striking in Hall's drawing.

³ So named by Hall on June 19th, 1605 (see pp. 13 and 41; also Map Id).

- 27. We rowed over to the north-side of the river and sought for a roadstead for our ships, and found one, having 12 fathom deep, meaning to bring our ships thither, with God's help.
- 28. We rowed to our ships again, having but two days victuals. None could we get, being from our ships. The salvages eating raw meat, do kill with their darts, both fowl, fish, and flesh, so that there was little to get but that they brought us.
- 29. We came to our ships again, being from them nine days, having had much tedious weather, with thicks and snow, as we rowed along the coast, it being some 25



leagues betwixt the ships and the King's-ford. The vice-admiral welcomed us to our ships with a volley of small shot, being all in health, God be thanked.

- 30. We made ready to sail to the river we had been at with our pinnace, fetching home an anchor and getting our yards across.
- 1. This day, being the 1st of *July*, the wind northerly, yet at night it came southerly, and we set sail, hoping to have got to the sea, but the wind came westerly, with rain, and so we came in again.

¹ That is: they rowed back *towards* their ships, which they had left lying in the Southern Isortok (Cockin's) Fjord (see p. 99).

- 2. The wind northerly, and rain, we riding in this harbour still.
- 3, 4, 5, 6, 7, 8. The wind northerly, we rode still, being wind-bound, and much rainy weather; we buying of the salvages such things as they brought us, being fresh fish, namely, salmon-trout, nuskfish, codfish, and butfish, a little quantity serving for our victuals.
- 9. Being calm, we towed with our boats and shallops the vice-admiral to sea, our great pinnace going with them, our general and 12 of our men being also with them, they towing her astern of them, he leaving his two mates and the quarter-masters in the admiral, and they to come after him in her to the *King's-ford*.
- 10, 11, 12. We were wind-bound; the which time, we salted 2 barrels of salmon trout, the salvages brought us, we giving them old iron for the same.
- 13. At night, we turned to the sea, seeing in the offing the other ship, our *Vice-Admiral*, which had been put to the leeward of the place with contrary winds. That night, we had much rain.
- 14. Much wind southerly, so that we were forc'd to lie to and fro, short of our place, being hazey weather and rain. This day, one of our small shallopps broke loose from our stern, and we had much ado to get her again. Also, at afternoon, it became fair weather, so that it clear'd up and we got sight of land and of the King's-ford, and went in that night and anchor'd in the roadstead, where we sounded afore with our pinnace, there being 12 fathom and oozy ground; and we called the roadstead Grampus-road, for many times grampus's came into it.

¹ It appears from the drawing on the opposite page that the roadstead was at the entrance of an inlet; but of such there is only one on the north side of Itivdlek Fjord, namely, to the west of Kakatsiak, opposite the island of Tinungasak.

15. The Heart's-ease, our vice-admiral, came to us into the river; and, coming in to us, our small shallop being mann'd, our chief master-mate, William Gordon¹ so-called, rowed to her and met them; and, speeches growing betwixt our general and him, he caus'd Mr. Barker to anchor in a little sound on the south side of the river, being from us some 3 leagues. Our general, being angry, would not come aboard of us, but was in the vice-admiral. At night our pinnace came from the Heart's-ease, with commission for 4 mch more and for bread and beer, and so returned aboard the vice-admiral; our general minding presently



[Grampus Road.]

to row with the pinnace to the silver mine, the which he promis'd to bring us to, which put us in hopes that we should be rich men by it; yet it proved otherwise.

- 16. The wind northerly. This day, we had traffick with the salvages for trifling things, as darts and Scals skins, and for some unicorns horns.
- 17, 18. The wind still northerly, yet the vice-admiral turn'd out to the sea, going to a river which he called

This William Gordon seems afterwards to have been in the employ of the Muscovy Company. He also accompanied Jens Munk as pilot on his voyage to Hudson's Bay in 1619, and we have noticed him in treating of that voyage.

Romblaesford, distant from us 18 leagues to the northwards.¹

19, 20, 21, 22, 23, 24. We rowed to and fro in this great river, seeking if we could find any whales, to have kill'd one or two, that we might have got something for the profit of the voyage; for Mr. Hall, our general, told us that, the times he had been there afore, he had seen great abundance in this river of whales; and now we could see none. Also, we walk'd up the mountains to see if we could kill any wild beasts, as bears, or deers, or wolves, but we saw none. The cause is, the people of the country kill them for meat, as I wrote afore, so that it is rare to see any wild beast in Greenland, more strange to catch them of us; yet we see many times their footing.

25. We wondered that the salvages came not to us, but now one, and then one, thinking they had follow'd our vice-admiral, which was too true; for, this day, at night, came our vice-admiral, with our great pinnace at her stern, her flag hanging down, and her ancient³ hanging down over her poop, which was a sign of death; we, being most of us asleep but the watch, were soon awake, for our pinnace came aboard of us and told us of the death of our master and general, James Hall, and how with a dart he was

¹ Here, again, the distance is much overstated From their anchorage in Itivdlek to the outer part of Rammel's (Amerdlok) Fjord would be under 30 miles. It should here be noted that Baffin, who wrote the other account of the voyage, accompanied Hall on this expedition northwards in the pinnace (see p. 122), while Gatonbe, who wrote the present account, remained behind with the ship in the King's (Itivdlek) Fjord.

² Hall does not mention this fact in his narrative, but on his map of the King's Fjord the heads of four marine animals (which may be those of whales, though they look more like those of seals) are shown. Whales (two species), Walruses, Narwhals, and Fish, are shown on his other maps.

³ An old and obsolete name for a ship's flag or "colours".

slain of one of the salvages, and died the 23d of July; for, being in the ship's boat, and his man William Huntriff,1 and two more, one of the salvages offer'd to sell him a dart. he taking up a piece of iron, in the mean time he threw his dart at him, and struck him through his cloaths into his body, 4 inches upon his right side, which gave his death's wound. Mr. Barker and 20 men more were in the great pinnace, on the other side of the ship; the which, if the salvages would, they might have killed most of them in the pinnace, there being about them more than 150 boats of them, our men having no muskets ready, nor any other provision to prevent them from hurting them; for our men did think they had come in a friendly manner to bargain with them; yet it proved otherwise, to the danger of them all and the loss of our general. This news coming, contrary to our expectation, made us not a little sorrowful.

26. Mr. Barker, master of the vice-admiral, being, by our general, Mr. Hall, lying on his death-bed, authorized to be master and general of the ships, and to dispose of all things, according to his liking, for the good of the voyage and safety of the men, yet by these controversies growing amongst the men, in that Mr. Wilkinson, doer for the venturers, and William Gordon, and John Hemslay, mastermates, being vex'd, and stomaching that he should be master of the admiral and general of both the ships, would not consent nor agree to it, they thinking to place one of themselves, but they falling to hard words, Mr. Barker leaving them, came afore the mast, and, calling the rest of the company together, discoursed from point to point the will and command of our general, late deceas'd, shewing

¹ Misprint for "Huntriss". For a notice of him, see the Introduction. Hall describes Huntriss as "my boy" in 1605 (see p. 42). He also accompanied Hall in 1606, and had now risen to be Master.

² That is "factor", "merchant", or "trader": the commercial representative of the "Adventurers".

us withall the writings and full consents which he gave, with the consent of all the company in the vice-admiral, and some of the chief officers who were there in the admiral, as the goldsmith, the surgeon, two quartermasters, the cockswain, and master of the pinnace, and 10 men more of the admiral's company, who set their hands to it, being his last will and command, they belonging all to the admiral; yet many of our company, respecting neither writing, counsel, nor the consent of our late general deceas'd, cry'd out "John Hemslay shall be our master"; which voice being heard in the ship amongst all, we quartermasters, with the gunner, boatswain, surgeon, trumpeter, and cooper, and other officers of the admiral and vice-admiral, ended the uproar of the rest of the company with this conclusion: that Mr. Barker was better, wiser, more ancient, and more worthy of the place than they, having taken charge 20 years before, knowing by experience many inconveniences which might befall us, besides having been ruler and overseer of many good men in great ships in this town of Hull, besides other places of this realm, and having been one of the chief masters and wardens of the Trinity-house, one that was wise, and one that would speak for us amongst our merchants, and other great men, if need did require. Thus, we coming amongst the company, persuading them that none had more right than he, they presently consented, giving their hearty good-will.

27, 28, 29, 30. Having put in William Huntrisse master of the vice-admiral, in his own place, he¹ went himself master in the admiral and head commander of both the ships, causing them to be made ready for returning homeward with as much haste as we could make them, taking in ballast into both the ships for to make them bear sail,

¹ That is, Andrew Barker.

finding in the ships two months victuals, which well consider'd was little enough to supply our want homeward; so that, by the last of this month of *July*, we were fit to set sail with both our ships homeward.

- 31. John Gatonbe, one of the quarter-masters of the admiral, by intreaty of Mr. Barker and the rest of the company of the vice-admiral, went for master-mate of her; also, two of our men more went aboard of the Heart's-ease, with our cloaths, in the room of Mr. Barker and two men more that went home in the admiral.
- 2.2 This day, the 1st of August, our general, Mr. Barker, Mr. Wilkinson, John Hemslay, and Mr. Warinder, being one of the merchants deputies for them, came aboard, thinking to have taken 17 pound of unicorn horn which was in the vice-admiral, and to have carry'd it aboard the admiral; which the company of us answered that it should not go out of the ship, for we were, to carry it home in our ship, as able as they; which, when no persuasion would serve, they did sew it up in canvass, and deliver'd it to our master, William Huntrisse, before us all, to be deliver'd by him to our merchants, when God sent us to London, with their letters, if we should be parted.³
- 2. Our master and I was sent for aboard the admiral to dinner; where, after dinner, Mr. Barker gave us articles

¹ The Editor of Churchill's *Voyages* has probably somewhat altered this passage, for Gatonbe would hardly speak thus of himself.

² A misprint for "1".

³ The horn of the "Sea-Unicorn" or Narwhal (Monodon monoceros) was, at the period in question, commonly believed to be that of the Unicorn of fable, and most extraordinary properties were attributed to it. An enormous value was, therefore, set upon it: hence the care taken of this piece. There has long been in the Royal Castle of Rosenborg at Copenhagen a throne largely constructed of these tusks, which was formerly regarded as of prodigious value.

which should be kept betwixt us till God sent us to London, in our way homeward; also, if we were parted by any storm, then we should not come into any harbour till we arrived at London, except on some great occasion.

- 3. Riding with our yards still across, being ready to take the first wind, for the salvage people would not come near us, being afraid we should kill some of them for the death of our master *Hall*; for we rowed up this river, the *King's-ford*, and found it but 20 miles up, no salvages coming near us.
- 4. We came out of the *King's-ford*, the wind being at E.S.E., and so came to the sea, we turning homeward, committing ourselves, our ships, and voyage to God all-sufficient, who having been our guider hitherto, so he would continue his loving mercy to us still. This day, we had much rain and calm weather, with a great sea that came from the southern-board.¹
- 5. The Wind at E.N.E., we being 8 leagues off the land, and Mount *Cunningham*, the place we came out of bearing east of us; it falling calm, and little wind, and came southerly; yet, at 2 o'clock in the afternoon, we had much wind and rain.
- 6. The wind at S.S.E., thick and rainy weather; we sailing S.W. from the land; and at noon we stood into the shore, being fair weather.
- 7. The wind at E., we sailing S. by W., and at 4 o'clock it came to north in the afternoon. This day, we observed the sun and found the pole's altitude 66 degrees, being quart off² Queen Anne Cape, it bearing off us E. by N.

¹ This is a rare, obsolete, and interesting word, meaning, of course, the southern side or quarter. The corresponding word, "westerboard", occurs in the account of Hawkridge's Voyage in 1617 (see Miller Christy's *Voyages of Foxe and James*, p. 253).

² Perhaps a provincialism for "thwart."

- 8. The wind at S.S.E., we standing in with the land, being much rain; and, at 8 o'clock in the morning, we tack'd about and stood to the sea again. This day, we met with two islands of ice.
- 9. The wind most part southerly, being quart the harbour we rode in the second time we harboured, which we called *Cockenford*, it being E.S.E. off us 5 leagues, tacking about to the sea at 8 o'clock in the morning.
- 10. The wind at south-west, we sailing S.S.E. into the land, being much rainy thick weather; and, at 10 o'clock in the morning, we tack'd about to sea again.
- 11. The wind southerly, with thick misty weather, we standing off to the sea, and sometimes to shore again.
- 12. The wind southerly, and rainy weather. This day, we sail'd in to the land, lying at E.S.E. At 8 o'clock in the morning, we stood to the sea again, and at noon it became fair weather, and the wind came to the north-east, we sailing S.S.W. along the land.
- 13. The wind northerly, we sailing S.S.W., and at 8 o'clock in the morning we sail'd south; and at noon we went quart of *Wilkinson's* islands, so called by us, the first place we came to harbour in, when we came into the country, amongst these islands.² Here was our great pinnace set together. Here was *James Pullay* slain with a dart of the salvages.³ The height of the pole is 64 degrees here. This day, at 4 o'clock, the salvages rowed to us into the sea, and kept us company 2 or 3 hours, our ship sailing 6 mile an hour, and then took their farewel.⁴ This day, also, afore night, we sailed by many islands of ice.

¹ Probably Isortok Fjord (see p. 99, n.).

² See p. 95.

³ On June 5th; see p. 97.

⁴ As there is no mention of Greenlanders having been taken, it was probably one of these whom Barker captured and carried home;

- 14. The wind continuing still northerly, we sailing along the land south. This day, we pass'd by much ice. This day, we observed the sun, the pole's altitude being 62 deg. I minutes.
- 15. The wind still northerly, we sailing south. This day, we observed the sun and found the height of the pole 60 degrees 19 minutes, being the height of the cape of *Desolation*, it bearing off us east, being 20 leagues off, sailing by much ice; and sailing at noon S.E. brought us into more ice, so that at night we were forc'd to hale to sea, S.W. before we got clear of them.
- 16. The wind came to the north-west, with misty weather, we sailing S.E. This day, it clear'd up at noon, and we did observe the sun and found the altitude to be 59 degrees 20 minutes.
- 17. The wind came to the south-east, we sailing S.S.W. This day, our admiral took our shallop from us, which we had towed 150 leagues at our stern. This day, we were clear of the ice, seeing none.
- 18. The wind at east, we sailing S.S.E., and at noon it was fell misty weather, and little wind. This day, at night, it was so thick that we lost sight one of the other, so that they could not hear us, nor we them, although we

for Mr. Markham says (Voyages of Bassin, p. 28, n.) that, in the hall of the Trinity House at Hull, there still hangs a Kayak, with a model of a Greenlander in it, and bearing this inscription: "Andrew Barker, one of the Masters of this House, on his voyage from Greenland, anno domini 1613, took up this boat and a man in it, of which this is the effigy." The expenses connected with the carving and painting of the effigy are found entered among the accounts of the Corporation in the years 1619 and 1620.

¹ This latitude is wrong. On the Admiralty Charts, Cape Desolation lies in 60° 47′, and on Gerritsz's Chart (which Gatonbe probably knew) it is about the same. Perhaps Gatonbe mistook for Cape Desolation the southern headland of the Island of Sermersok, which lies about the latitude named by him.

shot muskets, did drum, and hallow to them, and they to us, being all night one from the other parted.

- 19. The wind at E.N.E., and misty weather, we sailing south-east. This day, we saw our admiral again at 10 o'clock in the morning, we being 3 leagues to the windward of her, so that we did bear up, lashing with her, having sometimes sight of her, sometimes none; so that it was 4 o'clock at night before we spoke with her.
- 20. The wind at N.E. by E. and fair weather. This day, our admiral took the shallop asunder that they had from us, and stow'd her in their ship's hold. This day, the wind came to N.N.E. toward night, being thick 2 or 3 hours, that one ship could not see the other.
- 21. The wind at north-east, we sailing E.S.E. This day, being fair, we did observe the sun and found the altitude of the pole to be 56 degrees 36 minutes, being to the southward of Cape *Farewell* some 75 leagues, it bearing from us N.
- 22. The wind at N.N.E., we sailing east. This day, the pole was raised 56 degrees 42 minutes, being a fair day, and the wind came to the north, we sailing E.N.E.
- 23. The wind at W., we sailing E.N.E. This day, we observed the sun and found the height of the pole to be 57 degrees, being in a very temperate air, and hot weather, the like we had not felt the time we were in *Greenland*.
- 24. The wind westerly, also we sailing E.N.E., being little wind, and at evening calm and rainy weather.
- 25. The wind variable, sometimes at N., and sometimes at W., being fair weather. This day, we found by observation the pole's altitude to be 58° 14′.
- 26. A fair day, the wind at W.N.W., we sailing N.E. and by E. and E.N.E., being little wind; and at afternoon we had a better gale.
- 27. The wind at N.W., sometimes at N., sometimes at N.N.W. being variable, with showers, sailing N.E. and by

- E. This day, we did observe the sun, the altitude of the pole being 59° 49'. Hoping to have seen a sight of *Friesland*¹ in our going homeward made us hale the more northerly course than we would have done; yet we could not see it.
- 28. The wind southerly, we sailing E.N.E. This day, we found by the sun the pole raised 61° 5′, the height of the northernmost part in *Shetland* and the southermost part of *Friesland*, being betwixt them 260 leagues, and *Shetland* bearing off us E., being from it 220 leagues by my reckoning. This day, the wind came to the S.E. in the afternoon, with much wind and rain, so that it increased to a great storm, so that we were forc'd to hand in our sails and lie in try with our main course, and stood to the westward; and, at 10 o'clock at night, it came in a shower of rain to the W.S.W.; then we stood to the eastward again, lying S.E.
- 29. The wind at W.S.W.; we, making more sail, went our course, E.S.E., having much wind; and at noon did observe, finding the altitude of the pole to be 61° 13'.
- 30. The wind southerly and so came to S.E., being much wind and rain, we sailing E.N.E.; and at noon we had a forceable storm, it being come to the E., we lying in holling² without sail; at night, it came to N.W. and so to the W., with extreme much wind and rain, God being our only refuge.
- 31. The wind at W.; and, at 4 o'clock in the morning, we set our sails, we going our course E. and by S. and E.S.E., being much wind, with showers of rain, and continued so with us all day.

September 1. Much wind at S.W., we sailing E. and by S.; and at noon we made observation of the sun, finding

¹ See p. 88, n.

² Lying to hull, or lying to.

the heighth of the pole to be 60° 25'. At afternoon, we had little wind, with showers of rain, being come to the S.

- 2. The wind variable, being for most part southerly, we sailing E.S.E.; and towards night fair and little wind. This day, we observed the sun, and found the pole's height to be 60° 9'.
- [3.] The wind at N.N.E, we sailing E.; and at 8 o'clock in the morning it came to N., with much wind, and made us shorten sail; at afternoon, it growing to a vehement storm, so that we laid in with our main-sail; and at 7 o'clock at night we took it in, and our admiral took in her main-sail also, and laid both in holling, having no sight the one of the other all night, being a vehement storm.
- 4. The storm continued, we lying in holling, the wind being at N.N.W., we having lost the sight of our admiral; and, being parted from us by this storm, we were a little sorry; but (seeing we could not help it, seeing it was God's doing) rest content, doing our endeavour to get to our country so soon as we could, God willing; reckoning *Shetland* E. of us 65 leagues. The wind lessened at 9 o'clock at night: we set main-sail and fore-sail, sailing N.E. and E., the wind being come to N.W.
- 5. The wind at N.N.W., we sailing E.N.E., being showers of rain and a fair gale of wind. This day, no sight we had of our admiral, perswading our selves not to see her till such time we came in *England*, and then hoping in God of a merry meeting.¹ This day, at afternoon, little wind, and sometimes calm. This day, we sounded with our lead

¹ They do not appear to have met again, as the *Patience* (the "Admiral") proceeded to London, while the *Heart's Ease* (contrary, apparently, to the order of the "General" (see p. 110) made for Hull. Probably she belonged to that port, as Andrew Barker (who was a Hull man) was Master of her before Hall's death.

and line, and had an hundred fathom of line out before we had ground.

- 6. Also, we observ'd the sun and found the altitude of the pole to be 59° 30'.
- 7. The wind at S.E., we sailing E.N.E., sometimes N.E. and by E., having fair weather: and, at noon, we had sight of a sail, which came right with us and would have spoke with us, but we bore up from her, thinking him to be a false knave, and we not provided with our ordnance nor our small pieces for him; and, seeing that we did shun him, he left us and went his course for St. George's Channel, or for the Lewes, or for some part in Ireland. This day, by our observation we found the pole's heighth to be 60° 7′. The wind being come to E.S.E., sometimes E., we sailing N.E. and by N., this day, we tacked about at 4 o'clock at afternoon, wending to the sourthward, S. and by E., being some 12 leagues off the land.
- 8. The wind at E.N.E., we sailing S.E. This day, we had sight of *Foullay* at 6 o'clock in the morning, it bearing from us E. and by N., 5 leagues off, we sailing still S.E. At 2 o'clock in the afternoon, we had sight of *Fair-Isle*, it

Fair-Island. Foullay.

These two islands, the sight of them made us joyful, giving praise to God for our good land-fall.

bearing off us E. These 2 islands were them we parted from when we sail'd to *Greenland*.¹ This day, at night, it became calm, and rain withal, sailing our course S.S.E.

9. This day, thick weather and calm; and, at 4 o'clock in the morning, the wind came up to S.S.W., we sailing for

¹ See p. 86.

the most part W. S. W., being fair weather; at afternoon, the wind southerly.

- 10. The wind southerly, we sailing E.S.E. to the eastward, being little wind, and sometimes calm, with showers of rain; yet, at noon it came up to N.N.W., we sailing our course S. and by E.
- 11. The wind at N.N.W. we sailing S. At 4 o'clock in the morning, we spied a sail that stood in with the land. This day, fair weather and little wind. This day, we did observe the sun and found the altitude of the pole to be 57° 13'.
- 12. This day, the wind southerly, we sailing W.S.W. in with the land, and had sight of the coast of Scotland, being some 5 leagues off, at 4 o'clock in the morning. This day, we sail'd close aboard the shore, being a league from St. Andrew's Bay; and, at 2 o'clock in the afternoon, we tack'd about to the sea. This day, we spoke with a Scotsman, which told us the harbour we went in withal, was St. Andrew's. This day, we had sight of many small sails, some sailing to the northward, some turning to the southward, we being some nine leagues to the N. of Scots Forth.
- 13. This day, being Sunday, the wind at S.S.E., we sailing to the land S.W., being small rainy weather; and, at 5 o'clock in the morning, we had sight of the land, being open of the Scots Forth, seeing the Bass and the May, two islands that lie in the mouth of the river of the Forth; and, at noon, we had sight of Stab's Head, being in the S. side of the Forth. This day, the wind came to the S.W. at 4 o'clock in the afternoon, blowing very hard, so that we took in our top-sails and sprit-sail; and, at

¹ St. Andrew's Bay, at the mouth of the Firth of Tay.

² The Firth of Forth.

³ St. Abb's Head (see also p. 86).

night, we did lie in try with our main-sail, it being increas'd to a forceable storm.

- 14. This day, the wind came to the W., being much wind all night; yet, at 4 o'clock in the morning, we set our fore-sail, having sight of *Cheviot* hills, over *Berwick*, it bearing W. of us; and at noon we had sight of *Tinmouth* castle. Also, this day, at 6 o'clock at night, we were quart of *Hunclife*, 2 leagues off, we sailing along the land S.E., the wind being come to N.W.
- 15. The wind at N.W., and much wind, we sailing S.E.; and, at 10 o'clock at noon, we met with a shoal, so that we went S. in with the land; and, at three o'clock at afternoon, we had sight of the land called the *Shield*, or *Cromer*, sailing along the land S.S.E. This day, at 8 o'clock, we came into *Yarmouth* roads and anchored.
- 16. This day, the wind at W., we weigh'd and set sail, and went through *Stanforth*,² and so to *Orford-Ness*, the tide being done.
- 17. The wind at W. and by S. This day, we turn about the Ness. This day, we spoke with our neighbours, William Robinson, master of the Frances, and William Hallay, master of a bark called the Christopher.
- 18. This day, being *Friday*, the wind at W., we turn over the *Spits*,³ being in company with *Carveils* and *Hollanders* come out of the eastland. This day, the tide being done we anchor'd, having sight of the buoy of the *Red-sand*.⁴

¹ Cromer (or, perhaps, one of the hills in its vicinity) seems to have been commonly known as "the Shield" at this period (see Miller Christy's *Voyages of Foxe and James*, p. 268, note 6).

² The Stanforth, or Stanford, seems to be a passage between the Corton Sand and Lowestoft, on the Norfolk coast.

³ The Spits seems to have been the name of the narrow passage between the Buxey and the Gunfleet Sands.

⁴ The Red-sand is near the Nore and off the Island of Sheppey.

This day, being Saturday, we sail'd up the river of Thames, the wind being easterly; and so, before London, in St. Katharine's pool, we anchor'd, having our flag and ancient hanging down, in token and sign of the death of Mr. Hall, our general; giving thanks to our good God for our safe arrival in our own country, who had deliver'd us from the cruelty of the salvages, the dangers of the blind rocks, in this unknown country, and the noisome cold weather in this waste wilderness, where there are huge mountains without wood, valleys without corn or grass, and the sea with small store of fish: yet snow and ice there are good store in the sea and in the land.

Another Account of the latter part of the English Expedition to Greenland, under the Command of Captain James Hall, in 1612.

By WILLIAM BAFFIN.1

As abbreviated by the Rev. Samuel Purchas.

[From Purchas his Pilgrimes (London, 1625), vol. iii, pp. 831-836.]

EDNESDAY, the eighth of July, 1612, in the morning, I perceived the sunne and the moone both very faire aboue the horizon, as I had done divers times before.² At which time, I purposed to finde out the longitude of

that place, by the moones coming to the meridian. Most part of this day I spent about finding of the meridian line;

¹ It has been assumed that Baffin accompanied Hall in the capacity of Pilot on board the *Heart's Ease*, but this is no where stated. It is not easy to see why he should have been selected for this post unless he had previously visited Greenland; but, of his having done so, we have no record. Indeed, we know nothing of Baffin before this time; but Foxe says (see *North-West Fox*, 1635, p. 59, and *Voyages of Foxe and James*, p. 99): "This was the first Sea-Voyage of this young Art's-man." An admirable account of his voyages is given in Mr. Markham's *Voyages of William Baffin*, 1612-22 (Hakluyt Society, 1881).

² This abrupt commencement clearly shows that Purchas abbreviated this narrative, as he did most of his others. At the time the narrative commences, the ships were lying in Cockin's Sound (the S. Isortok Fjord; see p. 99, n.).

which I did vpon an Iland neere the sea, hanging at the extreames of my meridian line two threeds with plummets at them, instead of an index and sights.

Thursday, the ninth day, very early in the morning, I went on shoare the iland, being a faire morning, and obserued till the Moone came iust vpon the Meridian. At which very instant I observed the sunne's height and found it 8° 51' north: in the elevation of the pole 65° 20'.1 By the which, working by the doctrine of sphericall triangles, having the three sides given (to wit, the complement of the poles eleuation; the complement of the Almecanter; and the complement of the Sunne's declination) to find out the quantitie of the angle at the Pole. I say, by this working, I found it to be foure of the clocke, 17 minutes, and 24 seconds. Which when I had done, I found by mine Ephemerides that the Moone came to the Meridian at London that morning at foure of the clocke, 25 minutes, 34 seconds: which 17 minutes 24 seconds, substracted from 25.34, leaveth 8.10 of time for the difference of longitude betwixt the meridian of London (for which the Ephemerides was made) and the Meridian passing by this place in Groen-Now the moone's motion that day was 12° 7'; which, conuerted into minutes of time, were 48 minutes 29 seconds; which, working by the rule of proportion, the worke is thus: if 48 minutes 29 seconds (the time that the Moone commeth to the Meridian sooner that day then she did the day before) giue 360 (the whole circumference of the earth), what shall 8 minutes 10 seconds giue [?] wit, 60 degrees 30 minutes, or neere there about, which is the difference of longitude betweene the Meridian of London

¹ In the following narrative, degrees and minutes are expressed in most places by the modern signs, instead of being printed in words, as in all cases in the original. This anachronism is due to an oversight for which the editors are not to blame.

and this place in *Groenland*, called *Cockins Sound*, lying to the Westward of *London*.

This finding of the longitude, I confesse, is somewhat difficult and troublesome, and there may be some small errour. But, if it be carefully looked vnto and exactly wrought, there will be no great errour, if your Ephemerides be true.1 But some will say that this kinde of working is not for marriners, because they are not acquainted to work propositions by the table of signes,2 and an instrument is not precise enough to find out the houre, minute, and second. For the losse of one minute of time is the losse of 7 degrees of longitude. I answere that, although the most part are not vsed to this worke, yet I know some of the better sort which are able to worke this and the like propositions exactly. And those which yet cannot, and are desirous to learne, may in short space attaine to such knowledge as shall be sufficient for such things. necessary it is that the longitude of places should be knowne, I leave to the judgement of all skilfull Marriners and others that are learned in the Mathematicks.

This afternoone it was agreed by the chiefe of our company that our master, *Iames Hall*, should goe in the smaller Ship³ farther to the Northward.

The foresaid Thursday, in the evening, he departed out of the *Patience* into the *Harts-ease*, to get forth of the harbor which our Master called *Cockins-ford*, in remembrance of Alderman *Cockin*, one of the Aduenturers;

¹ As a matter of fact, the longitude found by Baffin in this place is more than 8° too westerly. Still the result was very correct as computations of longitude at the time went. On his voyage in 1615, Baffin made a similar, and much more successful, observation (see *Voyages of Baffin*, pp. 124-126).

² Sines.

⁸ That is, the *Heart's Ease*, Vice-Admiral. As already stated (see p. 106), Baffin accompanied him on the trip northwards.

which place is in the latitude of 65° 20′. And the variation of the compasse 23° 28′ to the westward. That euening was very calme, and we towed our shippe forth with the shallops and ship's boat. But, within an houre or two after we were got into the offin, the winde being at North, it blew a great storme, which continued all that night.

The fourteenth, our Master turned the ship vp to the river againe, toward the river where the supposed mine should be. But the tyde was so farre spent that we could not get to sea, but were constrained to anker in a roade at the south side of the river, some three leagues from the *Patience*, in which place are many good rode-steeds to be found.¹

Thirsday, the sixteenth day, the winde was at Northwest, and blew so stiffe a gale that we could not get to sea that day. That night, eighteene of vs went into the ilands to looke for some deere, but found none. But we perceived the foote-steps of some great beast, which we supposed to be of some great Elke; the foote was as bigge as any Oxe foote.²

Tuesday, the twentie-one, the weather still continued in

¹ This passage is by no means clear, probably on account of the entries for the next foregoing days having been left out. Gatonbe's narrative is fuller.

² Notwithstanding Purchas's opinion (see p. 134), one would naturally conclude that the tracks could only be those of the Musk Ox (Ovibos moschatus). It appears, however (see Zoologist, 1895, p. 43), that there is no record of this animal having ever been met with alive on the west coast of Greenland, south of the glaciers of Melville Bay, which appear to have formed a barrier to its advance southwards, as those of Cape Farewell have to its advance round the southern extremity of the country from the east coast, where the Musk Ox is abundant. There is no mention of the animal in the Sagas which describe the old Norse Colonies on the south-east coast. Probably, therefore, the footmarks seen were merely those of the Reindeer, which (as Colonel H. W. Feilden has been good enough to inform us) appear very large in soft wet soil or snow.

such sort that wee could not by any means get to the river where the supposed Myne should bee. Wherefore our Master bare roome for Ramels-ford, being a river southward of another, called Cunninghams-ford, some twelve leagues. And we came to an anchor at the entrance on the south side of the ford, about seven of the clocke.

Wednesday, the two and twentieth day, about nine or ten of the clocke, the Sauages came to barter with vs, being about fortie of them, and continued about an houre and an halfe; at which time, our master, Iames Hall, being in the boate, a sauage with his dart strooke him a deadly wound vpon the right side, which our surgean did thinke did pierce his liuer.3 We all mused that he should strike him and offer no harme to any of the rest, vnlesse it were that they knew him since he was there with the Danes; for, out of that river, they carried away five of the people, whereof neuer any returned againe; and, in the next river, they killed a great number. And it should seeme that he which killed him was either brother, or some neere kinsman, to some of them that were carried away; for he did it very resolutely, and came within foure yards of him. And, for ought we could see, the people are very kinde one to another, and ready to reuenge any wrong offred to them. All that day, he lay very sore pained, looking for death euery houre, and resigned all his charge to Master Andrew Barker, Master of the Harts-ease, willing him to place another in his room Master of the small ship.

Thursday, the three and twentieth, about eight of the clocke in the morning, he dyed, being very penitent for all his former offences. And, after wee had shrowded him,

¹ Amerdlok Fjord (see Introduction).

² The Southern Kangerdluarsuk Fjord (see Introduction).

³ Baffin, who seems to have witnessed the assault upon Hall, gives a less detailed account of it than Gatonbe (see p. 107), who only heard of it by word of mouth.

⁴ See p. 48, n.

wee carried him in the shallop, to burie him in some out Iland, according to his owne request while he was liuing.¹ After we had buried him, we went in the shallop to seeke for the mine, which we had expected so long. All that day, we rowed along towards the North, passing by a Cape called *Queen Sophias Cape*.² That night we staied at an iland, some three leagues short of the river.

Friday, the four and twentieth, in the morning, wee rowed along and came to the place, which is on the south side of the entrance of Cunningham's river, and we found divers places where the Danes had digged; it was a kinde of shining stone, which, when our goldsmith, James Carlisle, had tried it, was found of no value, and had no mettall at all in it, but was like vnto Moscouie sludde,3 and of a glittering colour. That day, after we had dyned, we rowed vp that river some foure leagues, where divers of our company went vp into the mountaines, and found a valley more pleasant than they had seene in the countrey. That euening, we returned and came to the place where the Danes had digged their supposed mine, and tooke some of it in our boate to carry with vs, and returned toward our ship. That night, we rowed and sailed, and the next morning, about nine of the clocke, we came to our ship.

Saturday, the fine and twentieth, being Saint *Iames* his day, in the fornoone, we came to our shippe, lying on the south side of the river called *Ramels* River.⁴ And as soone

On the Danish Chart of 1832, Hall's grave is marked, but only by guess, the spot being really not known. Capt. Jensen and his surveying party endeavoured to obtain some clue from the natives, but in vain (Meddelelser om Grönland, vol. viii, p. 48).

² That is, the Præstefjeld (see p. 9, n.).

³ Mica. Several arctic explorers, in their anxiety to find something to give their geographical discoveries commercial value, have been similarly mistaken.

⁴ That is, to the *Heart's Ease*, not to the *Patience*, which vessel had remained in the King's Fjord.

as our master found that the people came no more to trade with vs, he determined to depart with the shippe into the Kings Ford, to the Patience; and, rowing about the harbour where we lay to finde some neerer way out to the sea, we found among the Ilands where many of their winter houses had bin, and some of their Tents were but lately carried away. In which place, wee also found one of their long boates, made of wood, and bound together for the most part with shiuers of whales fins, and covered with seales skinnes, being some two and thirtie foote in length, and some fiue foote broad, having tenne thoughts or seats1 in it. That day, about twelve of the clocke, we weighed anchor, and departed out of Ramels Ford, which lieth in the latitude of 67°,2 and the variation of the compasse is 24° 16', being a very faire river, and one of the most principall which we saw in that countrey, stretching in East and East and by South. This night, about one of the clocke, we came to the Patience, lying in the Kings Ford.

Sunday, the sixe and twentieth, Master Andrew Barker, and our Merchant, Master Wilkinson, with other of the company, were in conference about returning home, because that, since our Master was slaine, none of the Sauages would trade with vs as they were wont.

Wednesday, the nine and twentieth, we were likewise occupied about taking in of ballast, for our shippe was very light; and that evening it was agreed that Andrew Barker, Master of the Harts-ease, should goe Master of the Patience, which was sore against the minde of William Gourdon; and William Huntrice was appointed Master of the Harts-ease; and John Gartenby,3 one of the quarter-

¹ See p. 11, n.

² This figure is too high. The northern shore of Rammel's (Amerdlok) Fjord is in 66° 55'.

³ The same as John Gatonbe, author of the preceding account of the voyage.

masters of the *Patience*, was masters-mate of the *Harts-ease*.¹

Tuesday, the fourth of August, in the morning, the winde being northerly, a very small gale, we got to sea, where the winde came to the southward, and we tacked sometime on the one boord, and sometime on the other, making small way on our course.

Munday [sic], the tenth,² was raine and foule weather, as it had continued every day since wee came from harbour, saving the seventh day, which was somewhat faire; for commonly, while the winde is south, it is very thick and foule weather. We tacked sometimes on one boord, and sometimes on the other, making a South by West way, at noone six leagues.

Wednesday, the twelfth, it waxed calme, we being somewhat Southward of a cape, called *Burnils* Cape;³ and, about

¹ Gatonbe's narrative shows (see p. 107) that these arrangements were only made after a good deal of quarrelling.

² The events from the 5th to the 9th (which Purchas seems to have cut out of Baffin's narrative) are given by Gatonbe (see pp. 110-111).

³ Gatonbe does not mention Burnil's Cape; but, as he states (p. 111), that they passed Cockin's (Isortok) Fjord on the 9th and arrived on the 13th at Hope Harbour (Godthaab Fjord), whilst Baffin states that they passed Burnil's Cape on or before the 12th, it must have been some Headland on the coast which especially attracted their notice between the two places named. The one most likely to have done so is, perhaps, the mountain of Tookusak, which rises to a height of 1770 ft. on a peninsula, in 64° 52', forming, it is said, a very conspicuous object from the sea. It seems to have been named so by Hall on his voyage up. There is no other clue that we are aware to the origin of the name (supposing it is correctly spelled) than that the cape was named after one or other of two persons of the name of Burnel amongst the members of the North-West Passage Company (see Miller Christy's Voyages of Foxe and James, p. 646). Mr. Markham, however, suggests (Voyages of Baffin, p. 29, n.) that it may have been named after Oliver Brunel (known in England as Brownel), a well-known Dutch explorer, who is believed to have been in the Danish service about this time. On some English and Danish Charts, a "Cape Burnitt" appears in lat. 66° 27' or 28', on the Island

three or foure of the clocke in the afternoone, the winde came to the North and by West, an easie gale, with faire weather.

The eighteenth, at noon, we were in 58° 50′. The seuenteenth day, I tooke the variation of the compasse, finding it to be 13° 22′, contrary to the observations of others in this place. And, if any doe doubt of the truth thereof, they may with a little paines prove it. The eighteenth of August, the declination of the Sunne was 9° 58′, for the Meridian of London. But, we being almost foure houres of time to the westward thereof, there are three minutes to be abated from the rest: and so the declination was 9° 55′; and his height aboue the horizon was 24° 40′ in the latitude of 59° 0′; and his distance from the south to the westward, by the compasse, was 81°. And, for truth of the first observation, I tooke another shortly after, finding them not differ above 4 minutes.

Wednesday, the nineteenth, the winde still continued with thick and hasie weather, we being at noone in the latitude of 58 degrees 30 minutes, or thereabout, making a South South-east way, about ten leagues.

Thursday, the twentieth, was faire weather, the wind at East North-east, wee steered away South-east and South-east and by east, making at noone a south-east and by south way, about thirtie leagues, being at noone in the latitude of 57 degrees 20 minutes. This day, in the afternoone, I tooke the variation of the compasse, and found it about 11 degrees 10 minutes.

of Inugsugtusok, just south of the entrance to Itivdlek Fjord. If this is intended for Hall's "Cape Burnil", it is both wrongly spelled and wrongly placed.

¹ Gatonbe's narrative relates the occurrences from the 13th to the 17th (see pp. 111 and 112).

² Gatonbe's account (see p. 112) mentions bad weather on the 18th. Purchas probably cut out of Baffin's narrative the passage relating to it.

Friday, the one and twentieth day, faire weather, with the winde at North and North by East; and we made an East South east way, half southerly, some twentie foure leagues, being at noone, by observation, in the latitude of 56 degrees 50 minutes.

Saturday, the two and twentieth, faire weather, the wind at North and North by East; wee made an east way half southerly, some twentie two leagues, being at noone in the latitude of 56 degrees 47 minutes.²

Sunday, the three and twentieth, faire weather, the wind at West North-west, we making an East and East by North way, about twentic four leagues. This day I tooke the variation of the compasse, and found it to be 7 degrees 23 minutes, being at noone in the latitude of 57 degrees 26 minutes.³

Munday, the foure and twentieth, being S. Bartholomewes day, faire weather with a North North-west [wind], wee making an East North-east way, halfe northerly, about twentie seven leagues, and were at noon, by observation, in the latitude of 58 degrees 4 minutes. This day, I observed and found the compasse to be varied 7 degrees 20 minutes.

Tuesday, the fiue and twentieth, faire weather and calme, the winde at North; wee made a North-east and by East way, seuenteene leagues, being at noone in the latitude of 58 degrees 30 minutes.⁴ This day, I found the

¹ From this date, until the 2nd of September, both Gatonbe and Baffin, as they sailed home together on their respective ships, made and recorded almost daily observations of the latitude, and it is interesting to compare the difference between the two as a test of the reliability of such observations taken at the time. It is impossible to say which was the more correct in each particular case. Of course, if the ships were some way apart, both might be correct. For the 21st, Gatonbe (p. 113) gives 56° 36', Baffin 56° 50'.

² Gatonbe (p. 113) says 56° 42'.

³ Ibid. (p. 113) says 57° 0′. 4 Ibid. (p. 113) says 58° 14′.

common compasse to be varied one point, and the true variation to be 6 degrees 4 minutes.

Wednesday, the sixe and twentieth, faire weather also, with the wind North North-west, wee made a North-east and by East way halfe [? northerly], about twentie two leagues, being in the height of 59 degrees 10 minutes.

Thursday, the seven and twentieth, indifferent faire weather, with a stiffe gale of wind at the North Northwest, we making a North-east way about thirtie one leagues, being at noone in the latitude of 60 degrees 10 minutes.¹

Friday, the eight and twentieth, the wind at South-east, with a stiffe gale, wee made good about noone a North-east and by East way about twentie nine leagues. This day, in the afternoon, it blew so greate a storme that we were in great distresse, the winde at East South-east. But, about eleuen of the clocke, it came to the North-west and North-west by North. And we ranne some twentie leagues.

Saturday, the nine and twentieth, it blew so stiffe that wee could beare none but our foresaile, making an East and by South way, halfe southerly, about thirtie leagues.

Sunday, the thirtieth, all the forenoone, it blew a very stiffe gale, and about noone the winde came Southerly; and it blew a very great storme, which continued all that day and that night, in such sort that we could not saile at all, but all that night lay at hull.

Monday, the one and thirtieth, in the morning, about foure of the clocke, the winde came to the South-west, a very stiffe gale; at which time, we set our fore-saile. The wind continued all this day and night; we steered away East and by South, making at noon an East North-east way, about thirtie foure leagues.

Tuesday, the first of September, the wind still continued

¹ Gatonbe (p. 114) says 59° 49'.

at South-west, blowing a very stiffe gale; we steered away East and by South, making an East way about fiftie leagues. This day, at noon, we were in the latitude of 60 degrees 45 minutes.¹

Wednesday, the second, fair weather, with the wind at South-west; wee made an East and by South way, half a point southerly, about fortie-two leagues, being at noone in the latitude of 60 degrees 10 minutes.² This day, I observed and found the compasse to be varied three degrees to the Westward.

Thursday, the third day, faire weather, the wind at South-west; wee made an East by North way at noone, about twentie leagues. This day, in the after-noone, the winde being at North North-west, it blew a very stiffe gale for two watches; and, toward seuen or eight of the clocke, the storme so increased that our shippe was not able to beare any saile. And all that night wee lay at hull.

Friday, the fourth, the storme still continued, and we could beare no saile all that day till about foure of the clocke in the afternoone, at which time we set our fore course and our maine course. The night before, in the storme, we lost the *Harts-ease*. This day, wee made some twelue leagues East and by North, and wee fell to lee-ward lying at hull some fiue leagues South by West.

Saturday, the fift, calme weather, but very thicke and close all the fore-noone: the wind continued still at North North-west, we making, from the time wee set our courses the day before, about twentie leagues East half Southerly, beeing at noone in the latitude of 59 degrees 53 minutes.

Sunday, the sixt, faire weather, the wind at North Northwest, we steering away East North-east, and East and by North, made an East by North way, half northerly, some

¹ Gatonbe (p. 115) says 60° 25'.

² Ibid. (p. 115) says 60° 9'.

29 leagues, being at noone in 60° 10′. This day, the compasse was varied to the East sixe degrees. This afternoone, it was almost calme, and wee sounded and found ground at sixtie eight fathomes. This evening, about ten of the clock, the wind came to the South-east.

Munday, the seuenth, very faire weather, the wind Southeast and South-east by East; wee tacked in the morning to the Northward, and ranne East North-east and East by North vntill seuen or eight in the afternoone, at which time we tacked up to the Southward, and went away Southwest till toward twelve a clocke that night, twentie leagues.

Tuesday, the eight, in our morning watch, I found our selues to be in 59° 20′; and, about fiue of the clock, I espied land, which wee supposed to bee the Isles of Orkney, as afterward we found them to be the same; and, toward three of the clocke, we came to an anchor in a channell running betweene the Ilands, where the people came to vs, and brought vs hennes, geese, and sheepe, and sold them to vs for old clothes and shoes, desiring rather them than money. There are about eighteene of these Ilands which are called by the name of the Orkneis.

Wednesday, the ninth, it was thicke weather, and the wind so easterly that wee could not weigh anchor.

Thursday, the tenth, faire weather, and the wind came to the North-west, and about noone we weighed anchor; and, towarde fiue of the clocke, we were cleere off the Iles. The channel, for the most part, lyeth North-west and South-east. All that night we stood away South-east.

Friday, the eleuenth, faire weather, with the wind at North North-west; and, about nine of the clocke in the morning, we steered away South South-east, at which time wee had sight of *Buquham-nesse*, and about two of the clocke we were thwart of it.

¹ Buchan Ness (see p. 86).

The seuenteenth, we came to an anchor in Hull Road, for which the Lord bee praysed.

Here I thinke it not amisse briefly to relate the state and manner of the people of *Groenland*, forasmuch as I could learne; as also what likelihood there is of a passe into the Sea which lyeth vpon Tartarie and China.¹

The north-west part of Gronland is an exceedingly high land to the sea-ward, and almost nothing but mountaynes, which are wonderfull high all within the land, as farre as wee could perceive; and they are all of stone, some of one colour, and some of another, and all glistering, as though they were of rich value; but, indeed, they are not worth anything; for our Gold-smith, [ames Carlile, tryed very much of the Vre, and found it to bee nothing worth. If there bee any Mettall, it lyeth so low in the mountaynes that it cannot bee well come by. There are some rocks in these mountaynes which are exceeding pure stone, finer and whiter then alabaster. The sides of these mountaynes continually are couered with snow for the most part, and especially the north sides, and the No[r]th sides of the valleyes, hauing a kind of mosse, and in some places grasse, with a little branch running all along the ground, bearing a little black berrie; it runneth along the ground like Three-leaved Grasse heere in England.2 There are few or no trees growing, as farre as we could perceiue; but, in one place, some fortic miles within the land, in a river which wee called Balls River. There I saw, on the south

² The plant here alluded to is probably the Crowberry (*Empetrum nigrum*), the only plant in Greenland which has a black berry, but it can hardly be described as a grass.

¹ Baffin's views on this subject would have had much interest; but as the following remarks relate solely to Greenland, Purchas probably omitted Baffin's observations on the likelihood of a North-west Passage, in order to save space, overlooking this passage.

side of an high mountayne which we went vp, and found (as it were) a yong Groue of small Wood, some of it sixe or seuen foot high, like a Coppice in *England* that had beene some two or three yeers cut; and this was the most wood that wee saw growing in this country, being some of it a kind of willow, iuniper, and such like.¹

We found in many places much Angelica.² We suppose the people eate the roots thereof, for some causes; for we have seene them have many of them in their boats.

There are a great store of Foxes in the Ilands and in the Mayne, of sundry colours; and there are a kind of Hares, as white as snow, with their furre or haire very long.

Also there be Deere, but they are most commonly vp within the Mayne very farre, because the people doe so much hunt them that come neere the sea. I saw at one time seuen of them together, which were all that wee did see in the country. But our men have bought divers coates of the people, made of deeres skinnes, and have bought of their hornes also. Besides, we have divers times seene the footsteps of some beast whose foote was bigger than the

¹ Extensive tracts of woodland of this description occur commonly in South Greenland, chiefly in sheltered positions among the inner fiords, to which the sea-winds do not penetrate. Professor Lange "Conspectus Floræ Groenlandicæ", in Meddelelser om Grönland, vol. iii) enumerates five species of Betula, six of Salix, one of Alnus, one of Sorbus, and one of Juniperus as occurring. The tallest trees (specimens of Betula odorata) only reach a height of eighteen feet. Much interesting information concerning these woods is also given in Professor Warming's paper on the "Vegetation of Greenland" (Medd. om Grönl., vol. xii).

Archangelica officinalis was formerly much grown in England as a garden herb. Like other members of the genus, it has sweet, succulent roots, like celery, and is valuable as an anti-scorbutic. Lange says ("Conspectus Floræ Groenlandicæ", pp. xxxiv and 68) that, in Greenland, where it occurs in grassy spots near the coast as far north as lat. 69°, it is called Kuanek. The natives consider it a great delicacy,

foot of a great Oxe. Furthermore, the inhabitants have a kinde of Dogges which they keepe at their houses and tents; which Dogges are almost like vnto Wolues, living by fish, as the Foxes doe. But one thing is very strange, as I thought; for the pizzles of both dogges and foxes are bone.²

The people, all the summer time, vse nothing but fishing, drying their fish and seales flesh vpon the rockes, for their winter prouision. Euery one, both man and woman, haue each of them a boate, made with long small pieces of firrewood, couered with seales skinnes very well drest, and sewed so well with sinewes or guts that no water can pierce them through, being some of them aboue twentie foot long, and not past two foot, or two foot and a halfe broad, in forme of a weauers shittle [sic], and so light that a man may carrie many of them at once for the weight. In these boates, they will row so swiftly that it is almost incredible; for no ship in the world is able to keepe way with them, although shee haue neuer so good a gale of wind; and yet they vse but one oare; who sitting in the midle [sic] of their boate, and holding their oare in the middle, being broad at each end like our oares, will at an instant goe backward and forward as they please.

In these boates, they catch the most part of their food, being seales and salmons, morses, and other kinds of fishes. Some they kill with their darts, and other some with angles, having a line made of small shivers of whales finnes and an hooke of some fishes bones, with which lines and hookes we also have caught very much fish.

Also, they have another kinde of boate, which is very

¹ Purchas here adds the note:—"These seem to be Elkes, of Losshes". See, however, the note on p. 123.

Here Purchas also adds a note:—"The pizzles of Dogges and foxes are bone: so, also, is the Morses pizzle, of which I have by me one of stone."

long; for wee haue seene one of them thirty-two foot in length, open in the toppe like our boates, having tenne seats in it; in which, when they removue their dwellings, they carrie their goods or house-hold stuffe; for they removue their dwellings very often, as their fishing doth serve living in the summer-time in tents made of seales skinnes, and in winter in houses somewhat in the ground.

Wee could not particularly learn their rites or ceremonies; but generally they worship the Sunne, as chiefe authour of their felicitie. At their first approach vnto vs, they vsed with their hands to point vp to the Sunne, and to strike their hands vpon ther brests, crying *Ilyont*; as who would say: I meane no harme; which they will doe very often, and will not come neer you vntil you do the like, and then they will come without any feare at all.

They burie their dead in the Out-Ilands neere the seaside. Their manner of buriall is this:—Vpon the tops of the hils, they gather a company of stones together, and make theref an hollow caue or graue, of the length and breadth of the bodie which they intend to burie, laying the stones somewhat close, like a wall, that neyther foxes nor other such beasts may deuoure the bodies, couering them with broad stones, shewing afar off like a pile of stones. And neere vnto this graue, where the bodie lyeth, is another, wherein they burie his bow and arrowes, with his darts and all his other provision which hee vsed while hee was living. Hee is buried in all his apparell; and the coldnesse of the climate doth keepe the bodie from smalling and stinking, although it lye aboue ground.

They eat all their food raw, and vse no fire to dress their victuals, as farre as wee could perceive. Also, wee have seene them drinke the salt-water at our shippes side; but whether it be vsuall or no, I cannot tell. Although they dresse not their meate with fire, yet they are fire for other things, as to warme them, etc.

Divers of our men were of opinion that they were maneaters, and would have denoured vs, if they could have caught vs. But I do not thinke they would; for, if they had bin so minded, they might at one time have caught our cooke, and two other with him, as they were filling of water at an Iland a great way from our ship. These three, I say, were in the ships boate, without eyther musket or any other weapon; when, as a great company of the sauages came rowing vnto them with their darts and other furniture, which they neuer goe without, and stood looking into the boate for nayles, or any old iron, which they so greatly desire, while our men were in such a feare that they knew not what to doe. At length, our cooke remembered that hee had some old iron in his pocket, and gaue each of them some, as farre as it would goe, with his key of his chest. And presently they all departed, without offering any harme at all: but this I speake not that I would have men to trust them, or to goe among them vnprouided of weapons.







APPENDICES.

APPENDIX A.

ON THE STOCKHOLM CHART,1

By C. C. A. GOSCH.

THE very interesting manuscript Chart, to which we have several times alluded under the name of "the Stockholm Chart",2 is, as already stated, now preserved in the Royal Library at Stockholm, to which place it has, no doubt, been taken from Denmark. The earliest mention of it, as far as we are aware, occurs in a list of Danish historical manuscripts preserved in the Library just mentioned, written by the late Professor C. Molbech, of Copenhagen;3 but it was another Danish writer, Dr. J. K. V. Steenstrup, who first drew attention to it, and pointed out the interest attaching to it, in an article in the Swedish periodical Ymer,4 which is accompanied by a good, though somewhat reduced, reproduction. We have had no opportunity of personally inspecting it, but by the courtesy of Count Snollsky, the Principal Librarian of the Royal Library at Stockholm, and the kind assistance of Dr. Wieselgren, Sub Librarian, we are enabled to lay before our readers a full-size photo-lithographic reproduction, which we have To this, therefore, we may every reason to consider satisfactory. refer instead of a detailed description. There are, however, a few points which cannot be ascertained from our copy, and with regard to which we are indebted for information to the article of Dr. Steenstrup, supplemented by communications from Dr. The Chart is drawn on paper, the watermark of Wieselgren.

¹ Mr. Christy, who is unable to agree with the conclusions arrived at in the following remarks, will probably state his views regarding the Stockholm Chart

See Introduction, pp. xvi, xvii, xl, lxxi, cxiii.

* See Introduction, pp. xvi, xvii, xl, lxxi, cxiii.

* Danske Haandskrifter., i det Kongelige Bibliothek i Stockholm in Historisk Tidsskrift, 1843, p. 147 (Copenhagen).

* Bemærkginger til et gammelt Manuskript Kadrt over Grönland, in Ymer, 1886, pp. 83-88 (Stockholm, Swedish Anthropological and Geographical Society).

which represents a bunch of grapes. The outlines appear to have been drawn first in pencil and afterwards blackened with ink, which is still beautifully black, excepting as regards a few small islands on the west coast of Greenland, which are drawn in an inferior ink. This latter has also been employed for writing the names; but the four numbers placed against certain points of the coast are written in the same black ink in which the outlines are drawn. The two wavy dotted lines in the left-hand upper corner of our reproduction (evidently representing a portion of the coast of Greenland, in different positions from the line which has been blackened) are, on the original, drawn in pencil and continuous; but the compass-lines present the same irregular appearance on the original as on the copy. The map is quite unceloured.

It should be observed that the rather uneven marginal divisions indicating longitude are intended to count each for two degrees; Cape Farewell being very nearly in the right longitude as conspared with Shetland, which appears farthest to the east on the map. It may be noticed as a curiosity that the letters E. and W.,

belonging to the central compass, have been interchanged.

segards the origin and date of the Stockholm Chart, we do not possess direct information of any kind, and we are left to inference from the contents of the Chart and from other data. Before entering on these questions, we may, however, notice that the expression "the Stockholm Chart" may be taken in a double sense We may speak of the Stockholm Chart as a cartographic work or composition, of which there may exist or have existed several reproductions, differing, perhaps, in date, and even in cartographic detail; or we may mean only the particular copy now preserved at Stockholm. If, to begin with, we limit ourselves to this latter point of view, and attempt to determine the origin and date of the chart at Stockholm, we cannot but be struck by the fact that, out of eleven names, which are all that occur on it, ten are names bestowed by Hall on parious localities in Greenland on the Danish expedition to that country in 1605. The obvious inference is that that that, as it lies before us, is intended to illustrate Half's discoveries on that peculian; and it follows that, in its present state at least, it cannot be of older date than 1605: How much later it may be is not so easily determined. Line of these names occur in Hall's accounts of his voyages to Greenland. which were not published till 1625; others are not mentioned in these accounts, but are found on his maps, which have only quite lately come to light. As, however, some of these names appear on Hessel Gerritsz's map of 1612, it follows that Hall's accounts and maps must have been accessible in England, where they were preserved after Hall's return from Denmark, and the information by which the names were put on the Stockholm Chart may therefore, have been obtained from England at any time

before 1625. It is not, however, probable that, after Hall's return, anybody in Denmark should have secured from England either the information required for putting on the names, or the map with the names on. The most probable theory, therefore, is that the names were put on the Stockholm Chart in Denmark, while Hall himself was there; that is to say, not later, or not much later, than 1607. It would seem natural to suppose that Hall inserted them himself; but this opinion is open to various objec-It may be observed, in the first instance, that the handwriting on the Stockholm Chart is very inferior to that on Hall's own maps; but this argument is not of much force, because there is no reason why Hall may not in either case, or even in both, have employed some other person to put the names on. We do not possess any authentic specimen of Hall's handwriting. A strong argument, however, is afforded by the fact that the names are not all correctly put on. The mis-spellings Cuningam for Cunningham and Komblesfo. for Romlesford (as Ramelsfiord is called on Hall's map) are easily explicable on the supposition that they were written from verbal communication. But the transformation of Queen Ann's Cape into C. St. Ann, as on the Stock. holm Chart, can scarcely be thus explained, and must be due to a person unacquainted with the origin of that name. Still more important are the facts that the name of Cunningham's Fjord is inserted North of that of Prince Christian's Fjord, instead of vice versa, and that the name of Cape Christianus is very likely misplaced, as will be shown presently. We may add, though it is of lesser weight, that, if Hall himself had superintended the insertion of the names, that of Queen Sophia's Cape would scarcely have been omitted. The most probable view, therefore, seems to be that, though the information concerning the names must have been derived from Hall, they were actually put on the chart by some person not directed by him, nor well acquainted with the subject.

The date of the insertion of the names on the Stockholm Chart may thus be considered settled as nearly as it can be done now, and the outline can, of course, not be of later date than the names; but the question remains whether the Chart itself, apart from the names, was drawn on purpose, at the same time, or whether the names were inserted on an older map of independent origin. That the latter was the case is plausibly suggested by the fact that the names—as stated above—are written in an ink different from that which was used for drawing the outline. No safe conclusion, however, can be drawn from this fact alone, which, for aught we

¹ The names of saints were so much used in forming geographical names that a person hearing of Queen Ann's and Queen Sophia's Capes, but knowing nothing about the royal personages after whom they were named, might very naturally fall into such a mistake. Accordingly, we find on Hessel Gerritsz.'s Map the names given as Ann's Cape and St. Selver Cape.

know, may be due to the merest accident. The circumstance that some of the small islands on the west coast are drawn in the same inferior ink as the names, rather points to the inference that the draughtsman, having not quite finished the blackening of his pencil-lines, either by accident or compelled by some necessity, used some different ink for finishing the outline and putting on the names. The difference in the colour of the ink does not in the least disclose whether the names were put on a few hours or a couple of years after the drawing of the outline; and it does not, therefore, assist us at all in determining the date of the map, apart from the names. In order to form a fairly well-founded opinion on this question, we must, therefore, turn our attention to another set of facts, from which materials for a solid argument can really be drawn, viz., the representation on the Stockholm Chart of the countries concerned. If this does not exhibit any detail but such as we may consider to have been known before 1605, there would be no objection to place the date of the Stockholm Chart, apart from the names, earlier than that year; but, if in the outline of the coast we find features which are not mentioned in any record earlier than 1605, and which may have been, or even are expressly stated to have been, discovered by Hall in that year, then we are justified in concluding, or even forced to conclude, that the Stockholm Chart was drawn after 1605.

In this respect, we may notice, first, that, whilst on the New Map (1600) the coast of Greenland, from lat. 66° (the southernmost point touched or observed by Hall in 1605) to lat. 72°, is represented as uninterrupted, a wide opening is indicated on the Stockholm Chart, between lat. 68° 30' and 69° 50'. In lat. 68°, the west coast of Greenland, as shown on this map, turns N.E., and in 68° 30' it turns quite easterly, but is continued only for a short distance in this direction. In lat. 69° 50', another shoulder of land is shown, from which the coast trends northwards as far as lat. 72°, and north-westwards for a short space. There can be no reasonable doubt of this opening being meant for the entrance to the Bay of Disco. It is the earliest known representation of it; and, under the circumstances, we are justified in assuming that this feature was introduced on the Stockholm Chart as a discovery of Hall's. It is true that in the accounts of his voyages there is no mention of the Bay of Disco, nor does he profess to have advanced further than lat. 68° 30' or 69°. But it should be remembered that, of Hall's expedition in the pinnace, on which he reached so far north, we possess no account except Leyell's very laconic notes; and, though he cannot have explored the Bay, he may very well have seen the opening of it from his northernmost point. In fact, his apparent inconsistency in stating in one

place1 that he had explored the coast as far as lat. 69°, whilst in another place² he mentions 68° 30' as the latitude of the point where he turned back, may be reconciled by supposing that in the former place he reckoned the extent of coast explored by him as far as he had been able to see it (as he did with regard to Queen Ann's Cape), and that, when he put down the figure of 69°, he had in his mind the southern extremity of the island of Disco, which he may then have guessed to be in that latitude, though he may afterwards have corrected that estimate. The view that Hall actually observed the entrance of the Bay of Disco is not a little strengthened by the occurrence of the word "freet" after the name of Christian Friis Cape, on the Stockholm Chart. abbreviation of the Latin fretum, and was used at that time both in Danish and in English to signify a strait. In this place, it seems to indicate that something in the nature of a strait had been observed here, and nothing would be more likely than that the bay appeared to them as a strait trending eastwards. In fact, it may really quite properly be described as the wide southern portion of the strait separating Disco Island from the mainland. Whether this bay or strait had been seen before by Davis we cannot decide with certainty. It is not mentioned in his narrative, though he must have passed it; and it should be remembered that the absence of any allusion to it in Davis' account is of more weight than the like omission in Hall's narrative, because we have the former in an authentic and complete form, but we possess Hall's account only as abbreviated by Purchas; nor does it appear ever to have contained any detailed record of that part of the voyage, on which the Bay of Disco must have been discovered, if so it was. Moreover, Davis, sailing night and day at some distance from the shore, is more likely to have been prevented by darkness, fog, or other accidental causes, from seeing it than Hall, who sailed close to the shore and lay still at night. We have, therefore, little hesitation in adopting the view already suggested by Dr. Steenstrup that Hall really was the first discoverer of the Bay of Disco, and that the opening in the coastline was introduced on the Stockholm Chart as representing one of Hall's discoveries in 1605. this part of the coastline must have been drawn subsequently to that year.

On the western coast of Greenland, between latitude 68°30' and 66°, where most of the names are found, no particular

¹ See p. 14.

¹ See p. 14.
² In the explanation of Hall's General Map (Pl. 1V).
³ That is to say, in modern times; for the ancient Scandinavian navigators were probably acquainted with it. The surprisingly true representation of Greenland on numerous maps of the 15th and 16th centuries must be founded on information obtained from the North of Europe; and it is quite possible that the eastward turn of the coast, which on many of these maps forms the north-west corner of Greenland, may be the southern shoulder of the Bay of Disco, though in a wrong latitude. latitude.

feature can be pointed out which has a bearing on the question before us. The scale of the map is not so small that the leading features might not have been represented with sufficient accuracy to be recognised; and, if any such thing had been attempted, it would, of course, at once have removed all doubts; but that has not been done, probably because the necessary detailed knowledge was wanting, except as regards a very few localities of small extent. It is merely a schematic or conventional representation of a deeply indented coast, girt with many islands.

The west coast of Greenland, south of latitude 66°, was not explored by Hall in 1605, and does not, therefore, come into comsideration in this connection; but the southern extremity of Greenland, as represented on the Stockholm Chart, offers a feature of great importance for settling our problem. A small portion of the east coast, as much as may have been seen by Davis in 1585. or by Morgan in 1586, is shown, and south of that, a very prominent headland appears pointing south, against which one of the numbers before mentioned (10) is placed. As this latter must have been intended to refer to a key, it implies that the locality was well known, and had a name at the time when the map was drawn. The east coast being, at that time, altogether unexplored, and the representation of it on the maps of that period quite fictitious (which we believe is the reason why it is omitted from the Stockholm Chart), the promontory in question cannot be meant for any point on that coast, as might perhaps be imagined, on account of its not being the southernmost point of Greenland shown on the Chart. There can, therefore, in our opinion be no doubt that this promontory, which forms the south-east corner of Greenland, and plainly occupies the position of Cape Farewell, really is meant for it, as indeed most persons would assume at first sight. West of this promontory, about half way towards Cape Desolation, another still more prominent headland is shown. against which the name of Cape Christianus is written. or not this name is rightly applied is of no consequence for our present argument, which is not concerned with the names at The question we have to decide is whether this very prominent promontory on the Stockholm Chart is merely an accidental feature of a conventional coastline, or whether it was meant by the author of the map to represent some notable headland discovered or particularly noticed by Hall in 1605. have no hesitation in deciding for this latter view, not only because of its marked appearance, but also because, whilst Cape Farewell is marked (10), Cape Desolation is marked (12); from which we may fairly infer that the author of the map did intend to mark out some point which had been noticed by navigators between those two promontories. No such point between Cape Farewell and Cape Desolation is, however, mentioned in any record earlier than Hall's accounts of the expedition of 1605, and

the only one he names is Cape Christianus. Against the supposition that this promontory really was meant to represent Cape Christianus, two objections may be adduced. In the first place, it may be urged that on the Stockholm Chart this promontory is represented as the southernmost point of Greenland by about 30 minutes, whereas Cape Farewell really reaches about two minutes farther south than any other headland on that coast, including that which is generally supposed to be Hall's Cape Chris-This, however, is of little force, because nobody is known to have determined the latitude of Cape Farewell till Hall @ Gatonbe did so in 1612. If, therefore, this map is not much later than 1607, the author cannot be credited with any knowledge of the comparative latitude of the two headlands, and, though Hall does not say that Cape Christianus was the southernmost point of Greenland, he may have thought so (without confounding it with Cape Farewell) previously to 1612. In the second place, it may be urged that the promontory in question cannot have been originally intended for Cape Christianus, because it is placed at a considerable distance west of Cape Farewell, whereas the promontory generally-and, for aught that can be said, rightly—supposed to be Cape Christianus lies only a few miles west of Cape Farewell. This objection would be serious if it could be assumed with any certainty that the author of the map possessed any knowledge of the distance between the two promontories. But that is not the case. Davis saw, or may have seen, Cape Farewell twice, but left no description or indication of its position. Hall was most likely with him on one of these occasions, and probably saw Cape Farewell, when in 1605 he named Cape Christianus; but it does not at all follow that he recognised it on In 1605, he came up with Eggersö, on which the latter occasion. both headlands lie, to the S.W. of the island; on the former occasion, he may have approached it from a different quarter; and if we compare Hall's sketch of Cape Christianus as he saw it in 1605 from the S.W., Cape Farewell coming out behind it, with the sketch of Cape Farewell in Gatonbe's account of the voyage in 1612, when Hall did recognise it, seeing it from S.S.E., no point of resemblance could be pointed out. Both Hall himself and the author of the Stockholm Chart (if they were different persons) may, therefore, perfectly well have imagined that the coast, after receding behind Eggersö, was continued eastwards for a considerable distance to Cape Farewell.1 It follows that, if there had been no other point on the coast with which the promontory marked Cape Christianus on the Stockholm Chart could be identified, it would

¹ It may be observed in this connection that, on a number of later maps, Cape Christian appears considerably west of Cape Farewell, very much as on the Stockholm Chart; proving that the misplacement of the name, if so it was, naturally suggested itself.

be difficult to resist the view that it really was meant for that headland. There is, however, another point which that projecting

headland may be intended to represent.

In Hall's account of the expedition of 1605, as we have it in Purchas' work, the following passage occurs: "Wee being this day in the latitude of 59 degrees 45 minutes, having stood all the night before, and this forenoone also, so nigh the shoare as we could for Ice, the Cape Christian South, South-east and North Northwest; and from the Cape to Cape Desolation, the Land lyeth East and by South and West and by North, about fiftie leagues." This passage, or rather as much of it as follows the words "for Ice is evidently corrupted, as there is no sense in the words "the Cape Christian South, South-east," etc. In our opinion, there can be little doubt that in the original account there was here a statement as to the direction of the whole coast from Cape Christian to Cape Desolation, the coast being described as consisting of two sections, one from Cape Christian to some Cape of which the description has been cut out or accidentally omitted from the printed text, and a second section from that Cape to Cape Desolation. A glance at the map shows that this coast really does exhibit such a division, into two portions, from the southernmost point of Eggersö to the southern extremity of the island of Sermersok, and from the northern extremity of Sermersok (which from the sea would appear as the base of a huge promontory) to Cape Desolation; and, moreover, that the directions of these two portions really are very much as indicated in the text. We consider it very probable that the promontory named Cape Christianus on the Stockholm Chart, dividing the coast from the cape marked (10) to Desolation in two parts, is really meant for the island of Sermersok, the southern point of which forms the western extremity of the straight coastline trending N.N.W. from Cape Farewell, and at the same time forms the eastern headland of the wide bay, terminated to the west by Cape Desolation, which is noticed in Gatonbe's account of the voyage in 1612.2 If so, the promontory marked (10) must represent Cape Christian, or, rather, the whole island of Eggersö.

In either case, whether the promontory in question was meant for Cape Christian or for the southern extremity of Sermersok, it represents a feature of the coast discovered or first particularly noticed by Hall in 1605, and consequently proves that the Chart

now at Stockholm was drawn subsequently to that year.

We have already pointed out that, if the names were put on the Chart between 1605 and 1607, the outline must have been drawn within the same period. If, however, we attempt, independently of that consideration, to determine, by comparison with other dated maps, how much later than 1605 the Stockholm Chart may be, we find that only one such comes into consideration, viz., the one published by Hessel Gerritsz. in 1612. With regard to some features (amongst which we may mention the promontory just treated of, which probably is identical with that called Halls Cape on Gerritsz.'s map), the two maps show so remarkable a resemblance as to suggest that the author of one had the other before him; no third map that could be looked upon as a common source being known to exist. As, however, the Stockholm Chart is so much the more comprehensive, correct, and (excepting Hudson's Strait and Cumberland Sound) complete of the two, it is more likely that Gerritsz. has borrowed from the author of the Stockholm Chart than vice versâ.

Having, as we believe, shown by the preceding observations that the Chart of which we have a reproduction before us was drawn and the names inserted on it after 1605, and probably not later than 1607, we have to consider the question whether it is an original or a copy. A clue to the solution of this question is afforded by the numbers, which are placed against four different points in the outline, and which we have already alluded to. There is no reason for thinking otherwise than that they were put on the Chart together with the outline, and refer to a now lost key, but they are evidently only fragments of a long series. facts seem to admit of but two explanations :- either the person who drew the outline intended at first to give the names of the localities by means of numbers and a key, but abandoned this intention after having placed a few of the former, after which the names themselves of some of the localities, referring to Hall's voyage in 1605, were inserted; or else the Chart before us is a copy of another similar one, on which the names were given by means of numbers, which latter were not intended to be put on the copy, where those four appear only by accident or mistake on the As the numbers are neither consecutive nor part of the copyist. confined to Greenland, we have no doubt that the latter is the true explanation. The view that the Chart now preserved at Stockholm is a copy of another which is now lost is, moreover, almost forced upon us by the fact that features which, it seems, must have been borrowed from a map like that in Stockholm, occur on some other maps, the authors of which cannot be supposed to have consulted our Chart in Denmark, where it must have remained from the first until it was taken to Sweden. We have no means of guessing who executed the copy, nor is the point of any material interest.

In passing, we may mention that if, as we consider established, not only were the names put on the Stockholm Chart but the outline was drawn subsequently to 1605, it cannot be the one which Hall gave to the captain and mate of the Lion, before they reached Greenland in that year, nor any copy

of it.1 We have no means of guessing what map that may have been.

We have hitherto, in speaking of the Stockholm Chart, confined our attention to the particular chart preserved at the Royal Library at Stockholm; but, if this is only a copy of another, differing only in minor respects, it follows that what we have said about the representation on it of different countries, and the conclusions to be drawn from this, applies with equal force to the supposed original, as well as to other copies which may have existed. Accordingly, what we still have to say on the Stockholm Chart must, if the contrary is not expressly stated, be understood as said of the Stockholm Chart as a cartographic composition, of which, for aught we know, there may have existed

several copies.

The next step in our inquiry will then be to determine, if possible, the authorship of the Stockholm Chart—taking this name in the more extended sense-and the materials made use of by the author. In these respects, we may first notice that the letters E. and W., which are attached to the central compass, and must be taken to belong originally to the Chart, prove its English origin; and, as it embodies Hall's discoveries in Greenland, it seems impossible to mention any one who had either the necessary qualifications or the occasion for drawing it, except James Hall, who must have executed it during his stay at Copenhagen in 1605-1607. The style of the Stockholm copy is different from that of Hall's maps accompanying his report to King Christian IV; but, as we do not know who executed this copy, the circumstance is of no consequence. Although, as we have shown, this map was drawn with the particular object of showing Hall's discoveries, it was evidently a work of wider scope. This is proved by the facts that Cape Farewell is marked not (1) but (10), and that one of the numbers (27) is placed against a locality on the American coast. It must have been intended to be a complete chart of the North Atlantic, based, as far as the Arctic Regions are concerned, on the discoveries of Frobisher, Davis, and Hall, and on which the names of the various localities were given by means of a series of numbers, starting from Europe and following the coast all round. as indeed would be natural. It is not probable that Hall would have constructed an entirely new map for this purpose; most likely he made use of an older map, showing the discoveries of Davis and earlier navigators, which he so modified as to show his own discoveries in connection with them: a view which has already been suggested by Dr. Steenstrup. The map which he thus utilised he must have brought with him from England; most likely it was the one by which he had sailed. As, however, no published map is known earlier than 1605, which bears such resemblance to the Stockholm Chart that it can be looked upon as having formed the groundwork of the latter, we must conclude that the map in question, which we believe Hall to have used, first for his own guidance and afterward as the groundwork of the Stockholm Chart, was a manuscript map. Marine charts had at that time commenced to be published, but not for such rarely visited regions. For voyages of discovery to them, charts had to be specially drawn, sometimes by the navigators themselves; sometimes by professional persons—mostly, no doubt, practical pilots like the *Cartschrywer*, Carolus Joris, or the Englishman, William Burrough, who drew a chart for the use of Frobisher. Few of these manuscript charts have survived to our time, and the Stockholm Chart is of special interest as belonging to that class.

If, then, our view is correct, we may look upon the Stockholm Chart—apart from the parts of Greenland explored by Hall—as being a reproduction of an older English manuscript map. would have been of great interest if we could have traced this further, but this we are unable to do with any certainty. Hall, on setting out for Denmark in order to act as pilot for the expedition to Greenland in 1605, supplied himself with the best information obtainable, and notably with a sailing chart embodying the most recent discoveries, particularly those of Davis, is a matter That these latter are shown on the Stockholm map is in no way surprising, and needs no comment. But, to the questions for whom or by whom it was drawn, whether for or even by Hall, we cannot with our present information give an answer. The fact that on the American side only the coastline with the openings of the various inlets is laid down-although Davis had explored, at any rate, Cumberland inlet to a considerable distance might be quoted as indicating that the map was especially drawn for use on an expedition to Greenland; as, however, the absence of these particulars from the Stockholm copy does not prove that they were absent from the original, no conclusion can be founded on it. Dr. Steenstrup has suggested that the Stockholm Chart, apart from modifications in the representation of Greenland, may be founded on, or even be a copy of, Davis's own map, which is supposed to have existed down to this century; and this view is very plausible, in so far that Davis's discoveries are shown on the Stockholm Chart more accurately and completely (except in regard to Cumberland Inlet) than on any other known map. Moreover, if Hall had sailed with Davis, he may have had special opportunity for obtaining a copy of it. But we have at present no means of further substantiating this idea. An objection to it might perhaps be founded on the great difference in the representation of the southern extremity of Greenland on the Stockholm Chart and on the Molyneux Globe, because Davis is supposed by some to have exercised great influence on the drawing of the Globe. As, in our opinion, the southern extremity of Greenland is precisely one of the parts of the Stockholm Chart which are drawn according to Hall's observations and views, an argument of that kind would, from our point of view, have no force. At the same time it must be admitted that, in the absence of any information as to the contents and details of Davis' chart, Dr. Steenstrup's suggestion cannot be brought to any serious test, but must remain a mere matter of opinion, which is indeed all that its author claims for it.

If, as we believe, the original of the Stockholm Chart was executed by Hall at Copenhagen, the probability is that he took it home with him when he returned to England. As Hessel Gerritsz., or whoever drew the map published by him in 1612, as also Gatonbe, must have had access to Hall's accounts, or obtained information from him, nothing is more likely than that they saw this map; and this fully explains how not only some of Hall's names, but also important cartographic features of the Stockholm Chart, such as the representation of Frobisher's Strait and of the south end of Greenland, have come to be inserted in their maps.

We may now turn our attention to some points connected with the Stockholm Chart, which, though of interest, have no bearing on its origin or date. It is a marine Chart intended for practical use, and it is therefore natural that only such coastlines are laid down as at that time had been, or were believed to have been, actually observed. The only voyages of discovery resulting in an extension of accurate geographical knowledge which had been undertaken to the Western Atlantic and the Arctic Sea, north of latitude 60°, before the Danish expedition to Greenland in 1605, were those of Frobisher and Davis. Their discoveries, with those of Hall, are therefore the only ones which we could expect to see indicated on that portion of the Stockholm Chart, and this is precisely what is the case.

On the western side of Davis Strait, the coastline commences in about lat. 68°30'. In Davis's accounts of his voyages, no higher latitude is mentioned on this side than that of Mount Raleigh, viz., 66°40'; but on the Molyneux Globe and the New Map two names occur to the north of this, viz., Cape Bedford and Saunderson's Tower. We may therefore fairly assume that this coastline on the Stockholm Chart is intended to start from the northernmost point seen by Davis. On the copy preserved at Stockholm no names appear along this coast, but on the original there were doubtless many, of which only one (27) is found on the copy. It may be intended for Mount Raleigh, being in the latitude indicated for this place in Davis's account, or it may be meant for Totnes Rode, as Dr. Steenstrup suggests. The entrances to Cumberland Sound, Lumley's Inlet, and Hudson's Strait are unmistakeably marked, though about 30' too northerly; and some few others might be identified. At the same time, it should be borne in mind that, as no actual survey or anything approaching to it had been made, the detail of the coast, as shown on the map, is to a very great extent conjectural; and that, where such an abundance of inlets and headlands is shown, as in this case, it is almost an accident if one does not find something near the proper latitude that may be regarded as intended to represent any given feature of that kind. Of Frobisher's discoveries, there are no indications on this coast, except in so far as Davis went over the same ground: the author of the map sharing, as will be seen, the misconception which prevailed at the time to the effect that Frobisher's Strait, etc., were situated in Greenland. The west coast of Greenland commences on this chart in about lat. 72°, which corresponds to the highest latitude reached by The coast is represented at this point as turning eastwards, very much as on the Molyneux Globe and the New Map at Hope Saunderson. We have mentioned already the interruption in the coastline corresponding to the Bay of Disco, and also that two wavy pencil-lines appear on the Stockholm copy, representing the coast of Greenland, between about lat. 69° and 72°, to the west of the black coastline. It will be seen, on comparing these lines, that the one nearest the black line is more like it, while the most westerly line reaches further south, so that the entrance to the Bay of Disco, of which the southern shoulder is marked in its proper latitude, appears narrower than in the black line. can be little doubt that these lines represent false starts of the draughtsman, who at first had not allowed sufficient space on that side of the paper for the American coast to be put on; they ought doubtless to have been deleted. In spite of a certain general resemblance, these lines differ much in detail, as indeed is natural, considering that the coast had not really been surveyed, Davis having but once sailed along it, so that material for an accurate representation was entirely wanting.

It is along the coast of Greenland between lat. 68° 30' and 66° that we find nearly all the names which occur on the map. We have already alluded to them in another connection, and full information on them has been given in the Introduction. we are right in our view, that the chart preserved at Stockholm is a copy of another similar one, in which the names were indicated by means of numbers and a key, we must suppose that, in the places where names are inserted on the copy, there were numbers on the original; and this agrees very well with the fact that there must have been ten numbers between No. 16 in lat. 65° on the Greenland coast and 27, which is the northernmost on the American coast. There is no record of Davis having bestowed names on any points on the coast of Greenland north of lat. 66°. except Hope Saunderson and London Coast. This latter name applied to the very portion of the coast which Hall explored, and was therefore most likely not used by him. North of Mount Raleigh (lat. 66° 40'), the Molyneux Globe places two names, presumably given by Davis. Even if these had numbers as well as Hope Saunderson, there would be seven numbers, the significance of which it would be difficult to suggest if they were not employed for Hall's names. Of these, there are nine on the copy, and two—Queen Sophia's Cape and Knight's Islands—have not been put on; but it may well be that on the original only the more important places were indicated by numbers. On the second voyage, Davis touched on this portion of the coast in lat. 66° 33′, but gave no name to the locality, which he describes as all'islands, perhaps the islands south of Holsteinborg. On the Molyneux Globe the name Lord Darcie's Islands occurs, but it seems to be misplaced, because in the accounts of his voyages he mentions only one place to which he gave a similar name, viz., on the American coast in lat. 54° 32′.

Between lat. 66° and 64°, the coast had not been really explored before 1605, though Davis had sailed along it in 1587; but there is no record of his having named any place there. It is, therefore, difficult to guess what can have been indicated by No. 16, which is placed about lat. 65°. On his last voyage, in 1612, Hall gave the name of Cockenford to a locality in this latitude (probably the southern Isortok); but we do not think that the map to which the numbers originally belonged was of so late date as 1612, in which case Hall, of course, could not have drawn it. The neighbourhood of Godthaab (Gilbert Sound) in lat. 64° was visited by Davis on all three voyages, and also by the Sunshine in 1586. The numbers 13, 14, and 15, therefore, most likely

referred to places there.

The coast between lat. 64° and Cape Desolation was not explored either by Hall or by Davis. It appears from Morgan's report of the voyage of the Sunshine that this vessel sailed along this coast at no great distance from land, but no details concerning it are given. It is therefore difficult to account for the indication of a considerable inlet which appears in about lat. 62°, except by supposing that the author of the map had some private information to the effect that the party in the Sunshine thought themselves to have observed such an opening. Like some other notable features of the Stockholm Chart, this opening reappears on Hessel Gerritsz.'s map of 1612, as well as on Gatonbe's. It should be noted, however, that the opening, as shown on the Stockholm Chart, is much wider than any inlet really existing on this coast.

The delineation of the southern part of Greenland on the Stockholm Chart is of particular interest with reference to the representation of Frobisher's discoveries; but, in order fully to explain this, we must trace the history of the manner in which these were shown on maps of that time—a subject which, in spite of all that has been written on it, does not appear to us to have

been fully elucidated.

On the maps accompanying Captain Best's accounts of Frobisher's voyages, the representation of the country which Frobisher mistook for Frisland does not indicate that his exploration had led to any new views concerning it. Best's statement that, "for so much of this land as we have sayled alongst comparing their carde, [that is, the Zeno map] with ye coast, we find it very agreeable"1. Frobisher's discoveries in America are shown on Best's maps in their proper geographical position. It is true that latitudes and longitudes are not indicated on the maps, and that in the text the latitudes are mostly left blank. As, flowever, Best gives the latitude (62°50') of Hall's island at the entrance of Frobisher's strait,2 this suffices to indicate the position of the latter. The maps, however, are very rudely drawn, and the various parts are rather indicated as to their general position than delineated with any attempt at accuracy. It is not unlikely that this circumstance may have contributed to lessen the confidence with which Frobisher's statements were received. In any case, it is clear, from Dr. Dee's map of 1580, that misunderstandings concerning Frobisher's Strait existed from the very first, owing perhaps to conflicting reports of his company. As regards the North Atlantic, this map is, in the main, a mere imitation of that of Zeno, but a very curious representation of Frobisher's Strait is introduced. Close to the east coast of America, between lat. 62° and 64° 30′, two narrow slips of land are shown in the Atlantic, trending S.E. and N.W., both ending pointedly towards the S.E., but without any definite termination towards the N.W., or any connection with the mainland of America. the westernmost of them, an island is placed. No names are attached, but there cannot be the slightest doubt that the channel between the two strips of land is intended for Frobisher's It is not quite clear whether this map is not, in spite of the statement on the front, earlier than Best's account, because the inscription on the back of it is so worded that it must have been written in the spring of 1578, whilst Frobisher's third expedition was being prepared, and it would seem strange that the inscription should have been written two years before the map was finished. Dr. Dee is known to have taken the liveliest interest in Frobisher's expeditions, and it would be very natural for him to have received early information of their results. As Frobisher's Strait was discovered in 1376, there would be nothing surprising in Dr. Dee having been able to give a representation of it on a map drawn in the spring of 1578; and (as his early information may not have been quite perfect) the fact that his representation differs so much from Best's would in that case be less surprising than it would be if the map had been

Best, True Discourse, etc., Second Book, pp. 5-6 (Hakluyt Soc. ed., p. 125). 2 Ibid., p. 8 (Hakluyt Soc. ed., p. 128).

drawn after the publication of Best's *Discourse*, which according to the colophon appeared late in December 1578. In any case, Dr. Dee's map is the earliest on which Frobisher's Strait appears

elsewhere than in its proper place.

On the map which Michael Lock, who was closely connected with Frobisher's expeditions, contributed to Hakluyt's Divers Voyages (1582), Frobisher's discoveries are represented more perfectly than on any other map of that time, or indeed of any time for two centuries after. Frobisher's Strait is shown in its proper position, and to the east of it a piece of land is drawn which is inscribed Frisland, and represents the country which Frobisher called so. It is placed directly south of Greenland, of which the southernmost point is placed in lat. 66° 30'. Though it bears the name of Frisland, it differs in shape entirely from the Frisland of the Zeno map. It is of elongated form, much longer from North to South than from East to West. The short southern coast is in about lat. 59°, the west coast is continued as far as 63° 30', where it ends abruptly; an eastern coast is shown as far as lat. 64°. The two coasts diverge strongly towards the north, but no northern coast is shown, the termination or connection of the country in this direction being left blank. That Lock so completely rejected the representation of Frisland on the maps of Zeno, Dr. Dee, etc., and substituted another quite different, was evidently caused by his having obtained what he considered more reliable information from persons who had accompanied Frobisher. As we are in the fortunate position of possessing two accounts of each of the three voyages, we are able to follow Frobisher's movements about his Frisland pretty closely. the first voyage, in 1576, they came up with that country on the 11th July at 9 a.m. in lat. 61°, attempted in vain to land, and had great difficulty in getting clear of the ice; but, on the following evening, at 8 o'clock, they were free and under sail, leaving the country. On the second voyage, 1577, they saw Frisland on the 4th July, in lat. 60° 30', and spent four days sailing round the southern extremity and along the west coast, standing away on the 8th. On the third voyage, in 1578, they had sight of Frisland on June 20th, but left on the next day. It follows that in 1577 Frobisher's party had a good opportunity of observing the southern and western coast, but that there was no opportunity of observing the east coast on any of the voyages, nor is there any indication in the accounts of such an exploration. Whilst, therefore, the south and west coasts of Frisland on Lock's map represent actual observation, the east coast must be conjectural, grounded probably on what could be seen at a distance. It happens, however, to be fairly right, and the consequence is that Lock's Frisland looks exactly like a repetition of the southern portion of Greenland which it really represents, though the author, of course, did not know it. That no northern coast is laid down

by conjecture, although the east coast is continued far beyond what could have been seen from lat. 61°—the highest recorded—may be founded in the fact that, as Best says, the west coast seemed to them to extend very far in latitude, or it may be connected with the speculations in which some on board indulged, and to which Best, in his account, alludes thus: "Some are of opinion that West England [Frisland] is firm land with the northern part of Meta Incognita or else with Greenland".2

Indeed, in looking back now, with Lock's maps before us, it almost incomprehensible that the truth concerning Frobisher's discoveries was not generally recognised at that time. But the fact is that there happened then, what does not rarely occur in the history of science: that men are within an ace of grasping the truth, but are turned on to a false scent by some misunderstanding or triffing circumstance, and in consequence grope in the dark for a long time. Unfortunately, Frobisher had described the country round the strait as a part of Greenland, taking this name in a extended sense. To this appellation geographers and persons interested in arctic discovery, as it seems, stuck blindly; and they persisted in imagining that the localities discovered by Frobisher were situated in Greenland properly so called (which in Frobisher's time nobody else had visited for a very long time). They did so in spite of Best's and Lock's maps, the last-named of which had particular claim to attention, as Lock was both a capable cartographer, and had the very best opportunity for obtaining reliable information. That Davis failed to see that he was going over the same ground as Frobisher seems very difficult to understand, unless we suppose that he either did not know or unreasonably distrusted Lock's map. After the publication of the latter, the matter in reality stood thus: that, for the truth to be realised, nothing more was wanting but that it should be recognised that the land which on Lock's map looked so exactly like the southernmost part of Greenland really was nothing else, and that Greenland had hitherto been misplaced too far north. Nothing more was required, in order to obtain as faithful a representation of Greenland as could be then produced, than to bring down Zeno's Greenland to the proper latitude and amalgamate it with Lock's Frisland. Had that been done, Frobisher's Strait could never have been moved away from the west shore of Davis Strait. But nothing of the kind was done. It was indeed recognised, in consequence of Davis's voyages, that Greenland reached much farther south than had been thought before; but it did not occur to anybody that Frobisher had made a

¹ True Discourse, Second Book, p. 5 (Hakluyt Soc. ed., p. 125).
2 Op. cif., Third Book, p. 5 (Hakluyt Soc. ed., p. 233).

mistake in applying the name of Frisland to the country which he passed on his way to the straits; nor did any cartographer think of identifying Lock's Frisland with Greenland. On the contrary, firmly persuaded that Frobisher's Frisland was Zeno's Frisland. cartographers seem to have reasoned to this effect: that, as Greenland was now shown to reach as far south as lat. 60°, it must have been the east coast of Greenland that Frobisher came to. steering west from Frisland; and they were thus strengthened in their erroneous ideas. In spite of the evidence of Best's and Lock's maps, they left the right track and laboured henceforth to localise Frobisher's discoveries in Greenland proper, which they could never have thought of, if they had understood that Lock's — that is, Frobisher's — Frisland was Greenland, seeing that by all accounts Frobisher's Strait was far west of his Frisland.

The localisation of Frobisher's Strait in Greenland was attempted in three different ways.

The earliest cartographic work in which Frobisher's Strait is localised in Greenland is the Molyneux Globe (1592). south coast of Greenland is here brought down to about lat. 61° and in about lat. 63° a strait is shown traversing Greenland from the east coast to Davis Strait, and opening into the latter just south of a projecting piece of land called *Desolation*. Several of the names bestowed by Frobisher on places in the vicinity of Frobisher's Strait are placed here, and the strip of land which is cut off from Greenland in the manner described is thus represented as identical with the land described by Frobisher as enclosed between Frobisher's Strait, the ocean, his "mistaken strait", and the supposed connection between the last and the firstnamed. The coastline, which really represents the northern shore of Frobisher's "mistaken strait" (Hudson's Strait) is thus made identical with the southern shore of Greenland, facing the open sea; and the place of Cape Farewell (which does not occur on the map) is occupied by the southernmost point of Queen Elizabeth's It seems difficult to understand how a combination which is so entirely at variance with Best's accounts and maps can have recommended itself to the designers of the Globe; and, perhaps still more, how Davis can be made responsible for it, as is done by not a few writers. The whole arrangement seems to us so much more like the work of geographical bookworms than that of a practical navigator who had been at the place himself, that the proper prima facie inference rather seems to be to the effect that he had nothing at all to do with it. this question is of interest in the history of cartography, as well as with regard to Davis himself, we may enter further into it, though it does not necessarily belong to our subject.

We have Davis's own words for it that it was through his influence, and that alone, that Molyneux came to be employed by Saunderson to make the Globe¹; and from this fact we may fairly infer that Davis had, or at any rate may have had, opportunity for influencing the work. Nor is there any doubt of his having supplied information, particularly as regards the Arctic Regions; in fact, Davis, in the same place, refers to the Globe as showing the position of the north-west passage he believed himself to have discovered and how far he proceeded. But it does not follow from this alone, that his views were carried out in all respects, or that nothing was done in respect of those parts that he did not approve of. On the contrary, notwithstanding the propriety of that general inference, any question as to how far Davis was responsible for any particular representation on the Globe, must be decided on its own merits alone.

Neither in the accounts of Davis's voyages nor in Morgan's report on the voyage of the Sunshine is there anything that indicates that the opening of a wide strait had been noticed near the southern extremity of Greenland. If Davis ever consented to, or even initiated, the representation of the south of Greenland on the Molyneux Globe, he must somehow have persuaded himself that the strait had been overlooked. As regards the eastern coast, he may have considered that neither he nor the master of the Sunshine had been sufficiently far north to see the entrance. regards the western coast, it may be that the inlet shown on the Stockholm Chart in lat. 62° was placed there on the strength of some unwritten report which had originated with the party in the Sunshine, and by which Davis may have been influenced; though that inlet appears on the Stockholm Chart north of Cape Desolation, whilst, on the Molyneux Globe, Frobisher's Strait is south of Desolation. But, as to whether or not these things have happened, we possess not the smallest scrap of evidence. Davis's work, The Worlde's Hydrographical Description, which was published three years after the Molyneux Globe, there is not the smallest direct reference to the subject; and Davis's language in respect of one matter which has an indirect bearing on it is distinctly incompatible with the view that Davis is responsible for the drawing of South Greenland on the Globe. We allude to his use of the name Desolation. As is well known, Davis bestowed this name on that part of Greenland which he first saw in 1585.2 Why he did so is not quite clear. It is quite possible that, when he first saw Greenland in 1585, he thought it to be a new and hitherto unknown country, which he did not in any way identify with Greenland, because this was shown on the

¹ The World's Hydrographical Description, fol. B 5.b. (Hakluyt Soc. edition of Davis's works, p. 211).

² The statement, by at least one notable author that Davis gave the name of the Island of Desolation to the island cut off from Greenland by the imaginary Frobisher's Strait, is, to say the least of it, exceedingly misleading. The name occurs on some maps, but neither Davis nor the authors of the Molyneux Globe or the New Map are responsible for it.

Zeno map much further to the north; but it is equally possible that he gave that name to the country before him simply because it seemed to him appropriate (as indeed he says himself), and without wishing to imply that it was not a part of Greenland. This latter name was at that time used in a very vacillating manner for want of real knowledge of the country, the communication between Greenland and Europe having then been interrupted for a long time. Although the Zeno map rightly showed Greenland to be bounded towards the west by a great sea, there were those (for instance, Frobisher) who still thought that it was connected with America. Davis may, therefore, have wished Howbeit, if in 1585 Davis really thought not to commit himself. that the land he had found and called Desolation was different from Greenland, he cannot be supposed to have entertained that view for long. In 1586, he despatched the Sunshine to the sea between Iceland and Greenland, there "to seek a passage". Henry Morgan, the purser, who of course had his information on these regions from Davis, wrote a report on this voyage to Mr. Saunderson, whose servant he was, in which he says that on the 7th of July they reached Greenland, and, coasting along it within a distance of three leagues, they came on the 17th to Desolation - expressions which plainly imply that "Desolation" was a part of or contiguous with Greenland.2 In the same year, Davis himself, after having left the west coast of Greenland in about lat. 64°, returned to it in lat. 66° 30′, which is a degree farther north than the southern extremity of Greenland, according to the Zeno Chart; but he does not at all intimate that he thought it to be a different country from that which he had just visited. In 1587, finally, Davis followed the coast of

[&]quot;And the seventh day of July we did see Greenland, and it was very high, and it looked very blew; we could not come to harborough into the land, being hindered by a firme land, as it were, of ice, which was along the shores side; but we were within three leagues of the land, coasting the same for divers dayes together. The seventeenth of July we saw the place which our Captaine Mr. John Davis the yeere before had called the land of Desolation, where we could not go on shore for ice. After we had cleered ourselves thereof we ranged along the coast of Desolation untill the end of the aforesaid month. The third day of August we had sight of Gilberts Sound," etc. (See Hakluyt's Principal Navigations, 1589, p. 787. Hakluyt Soc. ed. of Davis's works, p. 135.)

2 In his letter to W. Saunderson, of the 14th of October 1586, Davis writes: "the Sunshine came into Dartmouth the fourth of this month. She has 'been to

[&]quot;the Sunshine came into Dartmouth the fourth of October 1586, Davis writes: "the Sunshine came into Dartmouth the fourth of this month. She has 'been to Island and from thence to Groenland, and so to Estotiland, from thence to Desolation'," etc. (see Hakluyt, Principal Navigations, 1589, p. 786. Hakluyt Soc. ed. of Davis's works, p. 32). But this does not imply that Desolation was not a part of Greenland. One might perfectly well say that a vessel had been to Norway, thence to England, further to Flanders, and finally to the "fale of Wight, without implying that the Isle of Wight was not a part of England. At the time, Davis had evidently very imperfect information on the voyage. It appears from Morgan's report that the Sunshine had entered the Channel on the first of October, had sighted the Isle of Wight on the second, coasted eastwards the following three days, and arrived in the Thames on the 6th. She had probably just called at Dartmouth, as sailing ships used to do at one of the western harbours, to report their arrival in the Channel.

Desolation (which name he extended to the whole of Greenland), as far as lat. 72° 10', and recognised it to be Greenland: as indeed he could not help doing now, whatever doubts he may have had before. Accordingly we find in his Traverse Book, under June 30th, when he was in the latitude just mentioned, the following entry: "Since the 21st of this month [that is, since he left Gilbert Sound in lat. 64°], I have continually coasted the shore of Greenland, having the sea all open to the West." The accounts of Davis's voyages were published in 1589.1 Nevertheless, we find that, on the Molyneux Globe (1592) and the New Map (1600) the name of Desolation is restricted to a projecting piece of land forming the south-west corner of Greenland, and placed just north of the supposed western outlet of Frobisher's Strait. It is not improbable that the part of the coast to which Davis first applied the name of Desolation was in this neighbourhood,2 but in Davis's account no headland or promontory is spoken of; and in his Hydrographical Description, which was published after the Molyneux Globe, in 1595, Davis uses the name exclusively as synonymous with Greenland altogether, and expressly says that it was another name for that country.4

This fact is certainly not in accordance with the view that the representation of South Greenland on the Molyneux Globe was due to Davis or expressed his ideas. The argument derived from this consideration may perhaps appear to some as of no very great weight; but it is the only scrap of evidence, direct or indirect, bearing on this particular question which we possess, and we consider ourselves bound to go by it. In the complete absence of evidence to the contrary, we are entirely of opinion that, whatever influence Davis may have exercised on the Molyneux Globe, he is not responsible for the representation on it of Frobisher's Strait and the South of Greenland.

The representation of Frobisher's Strait on the Molyneux Globe was repeated on the New Map, but did not find many

¹ In Hakluyt's *Principal Navigations*, pp. 779-792. The Traverse Book did not, however, appear till 1599, in the second edition, vol. iii, p. 11.5

² The expressions used in the accounts of Davis's first voyage—both that of James

and his own in the Hydrographical Description—imply that he bestowed this name on the very first part of Greenland that he saw; viz., some point on the east coast not much north of Cape Farewell; but Henry Morgan's statement that they reached the place which Davis had called so, only after coasting for ten days, seems to imply that the place was much farther west. At the same time, his statements are too vague to admit of an exact interpretation, particularly because he does not state the latitude of his landfell on the cast coast.

state the latitude of his landfall on the east coast.

The name "Cape Desolation" is not due to Davis; but it is no doubt founded on a misunderstanding occasioned by the fact that the name "Desolation" on the Globe and the New Map was applied to a piece of land terminating in a marked promontory. "C. Desolation" occurs, we believe, for the first time on Barentz's Map of the arctic regions of, \$599 (reproduced in Hakluyt Soc. edition of Barents's Voyages, second edition, 1576).

* The World's Hydrographical Description, fol. B. 4, B. 5, B. 8, C. 2. (Hakluyt Soc. edition of Davis's works up 200, 217, 210.)

Soc. edition of Davis's works, pp. 209, 210, 217, 219.)

imitators, doubtless by reason of its glaring inconsistency with contemporary accounts. Cartographers certainly continued, with few exceptions, down to the second half of the eighteenth century to place Frobisher's Strait in the South of Greenland, but mostly in a manner more consistent with Best's statements. On these maps, to which we may refer as the second series the southern part of Greenland is seen traversed by two straits, of which the northern is intended for, and generally described as, Frobisher's Strait, whilst the southern represents Frobisher's "mistaken strait". The south coast of Greenland, with Cape Farewell, is shown more or less in its proper place. The maps of this series, which are very numerous, exhibit a great variety of modifications in detail, but these are not worth discussing, as they are purely hypothetical, the land itself remaining unexplored all the time.

Finally, in the third place, a certain number of early cartographers, while sharing the error of removing Frobisher's Strait from its proper place on the American coast to the east coast of Greenland, stopped short of the further error of representing this waterway as opening westwards into Davis's Strait. On their maps, therefore, the south of Greenland is drawn solid, not cut up into islands; and Frobisher's Strait is indicated farther north, as entering from the east coast, but ending blind in the interior of Greenland. earliest dated map on which this arrangement is shown is that published by Hessel Gerritsz. in 1612, to illustrate Hudson's last But it occurs also on the Stockholm Chart, and, as we consider the latter to be the older of the two, this must be pronounced the earliest known map showing Frobisher's Strait in this manner. As a glance at the map will show, it is very peculiar. A wavy coastline is laid down trending W.N.W., but terminating abruptly, representing evidently the northern shore of Frobisher's Strait; south of that, two other similar parallel lines are shown, connected by a third short line at their eastern extremities. representing together a long narrow peninsula, and standing clearly enough for Frobister's "Meta Incognita"; no southern shore of the "mistaken strait" is indicated, and the whole stands quite without connection with the outline of Greenland. It is quite evidently an adaptation of the representation on Dr. Dee's map; and it is not difficult to suggest the reason why the author of the Stockholm Chart adopted it. We have mentioned already that the author in question appears to have been unwilling to place any conjectural matter on his map without necessity; and we believe that it is for that reason that he has omitted both the hypothetical western outlet of Frobishie's Strait, and the whole of the long eastern, or rather eastwards trending. coast of Greenland, which then and for a long period after figured on almost all maps. As for Frobisher's Strait and the localities thereabout described in the accounts of Frobisher's voyages, he could not but look upon them as having really been observed; but the question was how to place them without committing himself to any doubtful hypothesis about the east coast of Greenland. The representation on the Stockholm Chart is, we believe, simply a contrivance to overcome that difficulty. The entrance to Frobisher's Strait is so placed that it would be on the east coast of Greenland if this were laid down according to the prevailing fashion, but the connection is not made.

On the next map of this series, that of Hessel Gerritsz., the arrangement is very similar. The east coast is here laid down in the traditional manner, but Frobisher's Strait and the "mistaken Strait" are not actually fitted into it. On the southern side, space is left open for the southern shoulder of the "mistaken strait", and on the northern side, the entrance of another inlet is indicated. Gatonbe's map, which is not dated, but must be a year or two later in date, is of little geographical value, but interesting in this connection, because on it we see the two straits fully incorporated with the outline of Greenland. Both straits are marked on the Planiglobe accompanying the Latin edition of Hessel Gerritsz.'s Detectio Freti (1613), and the same mode of representation is seen on several later maps: for instance, Hexham's edition of Mercator's Atlas (1636). Both James's and Foxe's maps (1633 and 1635) are of this type. It should be noted that, on the maps which we have described as of the second series, the connection which Frobisher suspected between the western extremities of his two straits (probably through what we call the North Bay), is supplied by Davis's Strait, at on most maps of this last series there is no western connection between them.

It is evident that this last series of maps (on which Frobisher's Strait is placed on the east coast of Greenland, in the proper latitude, whilst the south of Greenland is drawn solid), represents an independent current of opinion, upholding in this latter respect, against the error of the Molyneux Globe, the delineation of the Zeno map, which had been rather confirmed than otherwise by Davis's and Hall's voyages.

As we have shown before, the authorship of the Stockholm Chart can scarcely be ascribed to anybody else than James Hall. Whether he may have found the remarkable representation of Frobisher's Strait on some older map, of which he made use, we cannot, of course, tell; but that it would be agreeable to his own views we may fairly conclude from the following considerations:—In 1605, he had opportunity of seeing so much of the shore between Cape Christian and Desolation that he may have satisfied kinself that no strait opened in that part of the west coast of Greenland; at the same time Lyschander expressly states that when Hall, on the third voyage in 1607, found himself off the east coast in lat. 63°, he thought himself opposite the place which had been visited by Frobisher. We have shown to what great

extent the authors of Hessel Gerritsz.'s and Gatonbe's maps drew their information from Hall's narratives and maps, and the same undoubtedly holds good with regard to this item of Frobisher's It was, of course, through Hessel Gerritsz.'s map that it came to be adopted by some other cartographers. As far, therefore, as we are led by the facts before us, we believe ourselves justified in ascribing this peculiar manner of representing Frobisher's Strait to Hall as its author. At the same time, it is quite possible that in this matter he only carried out Davis's ideas. That the latter, at any rate in 1586, entertained the view that Frobisher's Strait was to be sought for considerably to the north of the southern extremity of Greenland may be inferred with no small probability from his instructions to the officers of the Sunshine when she was despatched on a separate expedition. According to Henry Morgan, their orders were "to seeke a passage northward between Greenland and Iceland, to the latitude of 80 degrees if land did not let us."1 The meaning of this can only have been that the Sunshine was to proceed northwards in order to seek a passage from the sea between Iceland and Greenland, through or round the north of Greenland. After this, or if they failed, they were to sail round the south of Greenland to the meeting-place in lat. 64° on the west coast. Next year, Davis himself explored the west coast from 64° up to 72°. It is extremely probable that in planning this complete exploration of both coasts of Greenland, Davis had Frobisher's Strait in mind. Unfortunately, the Sunshing does not appear to have made much way northwards; but she did follow the coast round the south of Greenland, and it is by no means improbable that Davis concluded, from the observations made, that the parts discovered by Frobisher were situated in some such way as indicated on the Stockholm Chart.

It remains to consider the manner in which Frisland is represented on the Stockholm Chart, and which, as will be at once recognised, is the same as the one seen on the New Map. The island is drawn very much as on the Zeno map, but with a wavy line attached to it, indicating by way of an alternative coastline, the southern and western coast, as seen by Frobisher. Owing to the larger scale of the Stockholm Chart, the drawing is somewhat more elaborate. Whether he author of the Stockholm Chart borrowed this peculiar representation from the New Map, or from some manuscript map, now lost, we have no means of saying. There is, however, one feature which may indicate that it rests to some extent on independent in symation, viz., that a portion of the line along the west coast is drawn quite straight, which may mean that while the ship was proceeding on that part of her way the coast was not really seen, whilst the to pieces connected by the

¹ Hakluyt, Principal Navigations, 1589, p. 787; Hakl. Soc. ed. of Davis's Works, p. 34.

straight line were actually observed. The line in question on both maps is different from the coastline of Frisland on Lock's map; but the idea of adding such a line to the traditional drawing of the island was probably suggested by the fact of his having given an entirely new outline of the island. It may be noted that the fact of all early cartographers who placed Frobisher's Strait on the east coast of Greenland having placed a representation of Frisland opposite it, proves conclusively that they had no notion of Lock's (that is Frobisher's) Frisland being Greenland; and that their delineation of Greenland was not the result of a combination obetween Zeno's Engroneland and Lock's Frisland.

1. The chart of the North Atlantic, which is now preserved in the Royal Library at Stockholm, in the same volume with the Danish reports on the expeditions to Greenland in 1605 and 1606, is a copy of another chart, now lost, which we believe to have been executed by James Hall during his stay in Denmark from 1605 to 1607, or perhaps a little later. The names on the copy were not found on the original, but were inserted by a person not thoroughly acquainted with the subject.

2. For the execution of the original of this chart we believe that Hall made use of an older English chart, which may not unlikely have been a copy of Davis's chart, but which Hall modified, in regard to Greenland, in accordance with his own discoveries and views.

3. The original chart, we believe, was brought back to England, and was there consulted by Hessel Gerritsz. or an English informant of his—perhaps by Hudson, of whose "card" Hessel Gerritsz.'s map is thought to be, in the main, a reproduction—and also by Gatonbe.

4. The representation of Frobisher's Strait on the Stockholm Chart is probably due to Hall, but may represent the ideas of Davis, who in any case cannot be considered responsible for the representation of Frobisher's Strait on the Molyneux Globe.

APPENDIX B.

"Busse ISLAND". ON

By MILLER CHRISTY.1

[See Introduction, pp. xxxix, lxxxix, and cxii; also pp. 24 and 58.]

On our very earliest charts upon which the northern portion of the Atlantic is depicted, there were shown several islands which certainly do not now exist (if they ever did so), and which are, therefore, commonly regarded as wholly mythical. The four principal of these islands were those which bore the names of Antillia, Seven Cities, Brazil, and St. Brandan.

It is manifestly difficult to prove a negative, and several centuries elapsed before geographical knowledge had advanced sufficiently for geographers to be able definitely to establish the non-existence of these islands. As was the case with many similar errors, cartographers in early days often found themselves face to face with the alternative, either to omit altogether features which were represented on earlier charts or referred to in old books, or to insert them on very insufficient evidence. The former they generally hesitated to do, lest their charts might be thought imperfect. Once inserted, therefore, mythical islands or other misconceptions often, in early days, remained long on the maps, for voyages of discovery were very few and far between, and opportunities for really trustworthy verification were correspondingly rare.

So far as the Atlantic is concerned, the islands in question remained long upon the charts because, until America had become more or less settled with Europeans, that ocean remained only very partially explored. Indeed, before the time arrived when geographers were able to declare without hesitation that these islands certainly did not exist, several other islands of more or less doubtful existence had appeared upon the charts; and these, like those which had appeared previously, maintained their posi-

tions thereon for a long period.

The other so-called islands here alluded to are chiefly those which owed their appearance on the charts to misconceptions arising out of the very perplexing Zeno Chart, which was published in 1558, and which (even if not altogether spurious, as it seems to be) undoubtedly exhibits errors which have confused all

I desire to acknowledge the valuable help and advice as to the arrangement of the matter in the following treatise which has been given me by Mr. C. A. Gosch, my co-editor in the rest of the work.

who have studied it. Among the more or less mythical islands which owe their origin to it, are those which bear the names of

Frislanda, Icaria, Drogeo, Podanda, and Neome.

The history—real or legendary—of the "Phantom Islands of the Atlantic" (as they have been called) has been studied with more or less diligence by many writers, among the chief of whom are Terrarossa¹, Buache², Eggers³, Gossellin⁴, Washington Irving⁵, Humboldt⁶, Thos. Wright⁷, d'Avezac⁸, Gaffarel⁹, Fleuriot de Langle¹⁰, Sebillot¹¹, and Winsor¹². Mr. F. W. Lucas is about to publish an exhaustive work on the Zeno Narrative and Chart, and I have in preparation a treatise on the Island of Brazil.

In the following remarks, however, I am not concerned with any of the foregoing, but with another equally-mythical island in the Atlantic, which first appeared upon the charts at a later period than any of the foregoing, and which there maintained its position for close upon three centuries—that is, to a later period than any of its predecessors—even, in fact, to our own time.

I allude, of course, to the so-called "Island of Buss", the history of which seems never to have been systematically studied by any previous writer on the Lost Islands of the Atlantic; and as, out of the many navigators who sought for it shortly after the first announcement of its discovery, Hall alone, in the narrative of one of his voyages printed in the prescrit volume, declares that he saw it, I think that some investigation into its history will not be out of place here.

The history of the alleged discovery of this island is as follows:—When Frobisher, in 1578, made his third and last voyage north-westward, he had, among the fifteen vessels of his large fleet,

¹ Rifflesione Geografiche circa le terre incognite (Padua, 4to, 1686).

² Mémoire sur l'Ile de Pristande. In the Histoire de l'Academie Revale des Sciences, 1784 (Paris, 4to, 1787), pp. 430-453.

^{*} Ueber die wahre Lage des alten Ost Grönlands (Kiel, 8vo, 1794), 116 pp. and two maps.

⁴ Recherches sur la Géographie . . , des Anciens (Paris, 4 vols., 4to, 1798-1813), vol. i, pp. 135-164.

⁵ Life and Voyages of Christopher Columbus (London. 4 vols., demy 8vo, 1828), vol. iv, pp. 313-336.

⁸ Examen Critique de l'Histoire de la Géographie du Nouveau Continent (Paris, 5 vols., 8vo, 1836-37), vol. ii, sec. 1.

⁷ St. Brandan: a Mediaval Legend of the Sea, edited by Thomas Wright, London (Percy Society), crown 8vo, 1844.

⁸ Les Isles Fantastiques de l'Ocean Occidental au Moyen Age (Paris, 8vo, 1845).

⁹ "L'Atlantide" in Revue de Géographie, vols. vi and vii (1880), and his Histoire de la Découverte de l'Amerique, etc. (2 vols., Paris, 8vo, 1892), vol. i, pp 202-237.

¹⁰ Rapport sur les Hauts-Fonds et les Vigies de l'Ocean Atlantique, etc., par le Contre-Amiral Vicomte de Langle (Paris, 8vo, 1865).

^{11.} Legendes, Croyances, de la Mer (Paris, 2 vols., 8vo, 1886).

¹² Narrative and Critical History of America (Boston, 8 vols. imp. 8vo, 1886-89), vol. i, pp. 40-52.

one, named the Emmanuel, which was a "buss". A "buss" is a kind of small, strongly-built, two- or three-masted vessel, which was generally of from 50 to 70 tons burden, and was formerly much used by English and Dutch fishermen in the herring-fishery, but is now almost obsolete. The vessel in question (which was commanded by a Captain Newton¹) belonged to Bridgewater, in Somersetshire, and is described as the "busse of Bridgewater", which description most later writers have erroneously taken for her name.2

Just before Frobisher's return home in the month of September, a storm of great severity scattered the vessels of his fleet; and. o although the other vessels started safely upon their homeward voyage, the little "buss" Emmanuel was left behind in a very perilous position at the mouth of a rocky sound, within the entrance to what is now known as Frobisher's Bay. She made her way, however, through this sound and returned safely to England, discovering on her way-or, at any rate, claiming to have discovered—the island which has ever since been known as "Busse Island."

The first published account of the discovery of the island was contained in Best's narrative of Frobisher's three voyages, which appeared in 1578, and reads as follows³:---

The Busse, of Bridgewater, as she came homeward, to y' South Eastwarde of Freseland, discoured a great Ilande "A fruiteful) new Iland in the latitude of - Degrees, which was never yet founde discouered. before, and sayled three dayes alongst the coast, the land seeming to be fruiteful, full of woods, and a champion countrie."

This record, however, probably remained comparatively unknown or little noticed until the year 1589, when there was published, in one volume, the first edition (so-called) of Hakluyt's In this volume, we find the following more famous work. circumstantial account of the discovery of Buss Island, written from the report of one who claims to have been on board the "buss" *Emmanuel*, of Bridgewater, at the time⁵:—

The Principall Navigations, Voiages, and Discoveries of the English Nation, made by Sea or over Land (London, fo., 1589), p. 635.

¹ That is, according to Best's True Discourse. Wiars (as mentioned hereafter) gives the Captain's name as Leeche.

² One authority (misled, apparently, by the contraction of the name in Best's narrative) has recently written of her as the Emma; while, in the account of Frobisher's three voyages appearing in J. F. Bernard's Recueil de Voiages au Nord (tome v, Amsterdam, 1724, pp. 435-494), she is spoken of throughout as "le Bridgewater.

³ A True Discourse of the Late Voyages of Discourie for Finding of a Passage to Cathaya by the North-Weast, under the Conduct of Martin Frobisher, Generall [By George Best.], (London, 4to, 1578), Third Voyage, p. 59. See also Collinson's Three Voyages of Martin Frobisher (Hakluyt Society, 1867), p. 280.

4 In Best's work, most of the figures indicating latitude were omitted, probably in order to conceal the position of the supposed gold-mine discovered by Frobisher, though this particular omission did not in any way further that object.

though this particular omission did not in any way further that object.

"The Report of Thomas Wiars, passenger in the Emanuel (otherwise called the Busse of Bridgewater, wherein Iames Leeche was Master, one of the Shippes in the last voyage of Master Martin Frobisher, 1578), concerning the discouerie of a great Island in their way homeward, the 12 of September.

"The Busse of Bridgewater was left in Bear's sounde, at Meta incognita,1 the second day of September, behinde the Fleete, in some distresse through much winde, ryding neere the Lee shoare, and forced there to ride it out upon the hazard of her cables and ankers, which were all aground but two. thirde of September, being fayre weather, and the wind North-north-west, she set sayle and departed thence, and fell with Frisland on the 8 day of September, at 6 of the clocke at night; and then they set off from the Southwest poynt of Frisland, the winde being at East and East-south-east; but, that night the winde veared Southerly, and shifted oftentimes that night; but, on the tenth day, in the morning, the wind at west-north-west, fayre weather, they steered south-east by south, and continued that course until the 12 day of September; when about 11 a clocke before noon they descryed a lande, which was from them about fine leagues; and the Southermost part of it was Southeast by East from them, and the Northermost next North-north-east or North-The Master accompted that Frisland (the South-east point of it) was from him, at that instant when hee first descryed this newe Island, Northwest by north 50 leagues. They account this Island to be 25 leagues long, and the longest way of it South-east and North-west. The Southerne part of it is in the latitude of 57 degrees and I second part, or thereabout. They continued in sight of it from the 12 day, at 11 of the clocke, till the 13 day [at] three of the clocke in the after noone, when they left it; and the last part they saw of it bare from them North-west by north. There appeared two harboroughs vpon that coast, the greatest of them seven leagues to the Northwardes of the Southermost poynt, the other but foure leagues. There was verie much yee neere the same lande, and also twentie or thirtie leagues from it; for they were not cleare of yee till the 15 day of September, after noone. They plied their voyage homewards, and fell with the west part of Ireland, about Galway, and had first sight of it on the 25 day of September.'

This narrative is appended to Thos. Ellis's account of Frobisher's third voyage. It was republished in the better-known three-volume edition of Hakluyt's Voyages, which appeared in 1599-1600 (vol. iii, p. 44), wherein was also reproduced (vol. iii, p. 93) Best's brief notice of the discovery of the island, already quoted, but with the latitude ("57 degrees and a half") inserted. It should be noted that, of the two foregoing narratives, that of

It should be noted that, of the two foregoing narratives, that of Wiars (which is much the fuller) is a personal narrative of events which he himself witnessed; whilst that of Best (although the first published) is merely a brief, hearsay, second-hand account,

¹ On the north side of Frobisher's Bay.

That is, in this case, Greenland. Frisland was the name (as will be remembered) of a large island which was supposed to lie in the middle of the Atlantic, between latitudes 61° and 65°. It was first represented on the well-known, but very misleading, Zeno Chart of 1558, and was copied on to most of the charts of the end of the roth century. Thus it was that Frobisher, when he encountered a coast lying in about lat. 60°, did not identify it with Greenland (which, on the Zeno Chart by which he was sailing, was erroneously shown much further north) but with the non-existent Frisland.

and differs from the foregoing in more than one respect. Thus, while Wiars says that they were in sight of Buss Island for only a part of two days, Best says they "sayled three dayes alongst the coast", adding that it seemed "to be fruiteful, full of woods, and a champion countrie", of which Wiars says nothing whatever. Nor is it at all likely that an island surrounded by such ice-fields as Wiars mentions would appear a fruitful country, full of woods. In short, this part of Best's account is evidently the outcome of his imagination, or of that of his informant, and may therefore be disregarded.

The next piece of apparently-original information concerning. Buss Island which we meet with is a statement by Luke Foxe in his North-West Fox (published in 1635), in which he reproduces, in a condensed form, the statements of both Best and Wiars as given above, adding in a side-note the following: - "If this Iland were found againe, there is great store of Fish about it." This additional piece of information was very likely obtained personally by Foxe from someone who was on board the "buss" Emmanuel on her homeward voyage—perhaps from Captain Newton himself; for we know2 that, for many years before sailing on his own voyage in 1631, Foxe had very industriously sought the acquaintance of those who had sailed previously in search of a North-West Passage, and had obtained from them all the charts and information he could which bore upon the search.

As regards early maps and charts on which Buss Island is shown, it is a somewhat remarkable fact that, although Best refers to the discovery of the Island in his True Discourse (as already mentioned), he does not show it, as he well might have done, on either of the maps which accompany that work.

The earliest map of any kind on which (so far as I have been able to discover) Buss Island is shown, is that on the celebrated Molyneux Globe of 1592, which was published only fourteen years after the reported discovery of the Island.3 "Buss Ins." is shown thereon as a fair-sized island with a complete coast-line, somewhat elongated to the east and west, and lying in lat. 58° 30'—59°, long. 356°—359° E. from St. Michael in the Azores (=30°—27° W. from Greenwich), some way to the south-east of Frisland, as described in Wiars' narrative, from which, no doubt, it was laid down by Molyneux.

Buss Island was next shown (so far as I can find), two years later, on the chart of 1594 by Peter Plancius, entitled "Orbis Terrarum Typus de Integro Multis in Locis emendatus".4 whereon

Op. cit., p. 33. See also Miller Christy's Voyages of Foxe and James, p. 59.
 See Miller Christy's Voyages of Foxe and James, pp. lviii and 262.
 The only known copy of this very interesting globe is preserved in the Library

of the Middle Temple.

⁴ This map (which is in two hemispheres) forms the general map of the world in the Latin edition (Hagae Comitis, 1599) of Linschoten's Voyage to India. The map,

it is shown as "Bus. Ins.", with a complete coast-line, in lat. 57° 30′—58° 30′, and long. 23° W. from Greenwich (355° E. from Ferro), lying to the south-east of Frisland.

In the following year (1595), "I. Bus" was shown on the chart entitled "Europa ost Kerstenrijck", in the *Caart Thresor* (p. 21), published at Amsterdam. The island has a complete coast-line, and lies in lat. 58°—59°, long. 31°—32° W. from Greenwich.

It is somewhat remarkable that no trace of Buss Island should appear on the very up-to-date "New Map" published in 1600, nor on any later published map (so far as I have been able to discover) before that of Hessel Gerritszoon, which first appeared in 1612.

On this Chart¹, the representation of Buss Island (or "Bus" as it is thereon called) assumes an entirely new type, and one (as must be admitted) more strictly in accord with the description given by Wiars. The position remains the same as before, the Island being shown in lat. 57° 40'—58° 30', long. 26° 30'—28° 20' W. of Greenwich, some distance south-east from Frisland. The representation of the Island itself is, however, quite different, the northern coast not being defined. The southern coast (which alone is indicated) trends S.E. and N.W., and shows the entrances to a couple of inlets or harbours. There can be no doubt that this different representation of the Island was due to a new and more careful study on Gerritsz.'s part of Wiars's narrative, which shows (as will be remembered) that the southern coast alone was seen—or supposed to have been seen,—that it trended about as shown, and that a couple of harbours were observed — or supposed to have been observed Gerritsz., however, also represents a small nameless islet a little to the N.W. of the main island, and for this I do not know how to account.

There can be no doubt that, from this Chart,—which went through several editions, and became very widely known,—the particular representation of the island shown thereon was transferred to nearly all the later charts on which it appeared during the seventeenth century.

The island is shown as "I. Bus" on Abraham Goos's Globe, published by Joh. Jansonnius at Amsterdam in 1621,² whereon it is Iaid down in lat. 57°, long. 3° E. from the meridian of Flores (=28° W. from Greenwich).

In 1633, it appears in lat. 57°-58°, long. about 30° W. from

as the title implies, is an amended edition of some former map—probably the Peter Plancius Map of 1592, of which no copy is now known to exist (see Mr. C. H. Coote's Introduction to Part I of Müller's Remarkable Maps of the XVIh, XVIth, and XVIIth Conturies. Amsterdam, 1894).

and XVIIth Centuries, Amsterdam, 1894).

1 The "Tabula Nautica" in Descriptio ac Delineatio Geographica Detectionis Freti ab H. Hudsono Inventi (Amsterdam, 4to, 1612).

² Reproduced in Müller's Remarkable Maps, (Amsterdam, 1894), No. 9

Greenwich, on Capt. Thomas James's "Platt", whereon, though nameless, it is shown very much as on Gerritsz.'s Chart.

Two years later, in 1635, it appeared as "buss" on the chart in Capt. Luke Foxe's work²; but thereon, though similarly placed (in lat. 57°—58°, long. 29°—30° W. from Greenwich), it is shown as three small islands lying due south from Frisland.

After this time, the Island continued to be marked, for many years, on most maps and charts; but, as the representation of it was copied from one to the other with little variation, it seems

unnecessary to cite further instances.

Nevertheless, even at this early period, there appear to have been cartographers who rejected the story of the discovery of the Island, and disbelieved in its existence. It has been already mentioned that the Island is not shown on the maps in Best's True Discourse; but this cannot have been because Best disbelieved in its existence, as he gives the account of its discovery a place in his work. The fact that the Island is not marked on the "New Map" of 1600 (as also already stated), nor on the Map of the World in Speed's Prospect (Lond., fo., 1631), nor on any of the maps in Hexham's (Mercator's) Atlas of 1636, may, however, probably be taken as evidence that their authors did not believe in the existence of the Island, as was most likely also the case with many other early cartographers of lesser consequence, on whose maps the Island is not shown.

There can be little doubt, however, that on the Marine Charts drawn for the special use of navigators, Buss Island was very generally inserted from at least the commencement of the seventeenth century onwards. We may infer as much from Hall's words in his accounts of his expeditions to Greenland in 1605 and 1606 (see pp. 24 and 58), wherein he says that, having looked out for it, he believed it to be misplaced "in the marine charts". Very few of these charts are now in existence, and we can only mention one exhibiting Buss Island, namely the "Stockholm Chart" treated of in Appendix A. The Island is shown thereon in lat. 57° 35' N. and (as near as one can reckon, for the degrees of longitude are not numbered) in long. 26°—27° W. of Greenwich. It has very much the same appearance as on Gerritsz.'s Chart—

merely a southern coast-line exhibiting three small inlets.

The size of Buss Island, as it appeared on most of the charts of the seventeenth century, was considerable. From north to south, it extended over a degree of latitude, whilst its width from east to west was about equal. In shape, the Island showed little variation, its northern coast being shown as unknown, and its southern coast exhibiting one or more small inlets. Its position,

¹ In The Strange and Dangerous Voyage of Capt. Thomas James (London, 4to, 1633); see also Miller Christy's Voyages of Foxe and James, vol. ii, facing p. 447.

2 The North-West Fox, or Fox from the North-West Passage (London, 4°, 1635); see also Miller Christy's Voyages of Foxe and James, vol. i, facing p. 1.

too, was fairly constant, the centre lying nearly always in about lat. 58° N., and in long. 27°—31° W., according to our present method of reckoning. In all these respects, the Island agreed tolerably well with the particulars given by Wiars, from whose account it was, without doubt, laid down on these charts.

Naturally enough, after Buss Island thus came to be shown on many, if not on most, of even the better charts, without any question as to its real existence, all navigators who passed near the position it was supposed to occupy kept a sharp outlook, in the hope of seeing it; and, as that position lay in the direct route to the entrances of both Davis's Strait and Hudson's Strait (the explorations of which, in the beginning of the seventeenth century, attracted much attention), those who thus looked for it in passing were probably not a few. Nevertheless, we have now no record of any one having done so before our author, James Hall, as related in the foregoing pages. On the 24th of May 1605, failing to find Buss Island in the position commonly assigned to it, he says:1-"I doe verily suppose the same to be placed in a wrong latitude in the marine charts", implying (as has been already pointed out) that it was then already commonly marked on those On his voyage in the following year (1606), however, he gives a different report, for he says2 that, on the 1st of July, he encountered "land, being eight leagues off, with a great bank of ice lying off south-west"; which land, he says, "I did suppose to be Buss Island, it lying more to the westwards than it is placed in the marine charts". This so-called "land" (which appears to have lain between lat. 56° 10' and lat. 58° 30', though the exact position is not stated) Hall was obliged to double; and, having accomplished this, he found himself in "a great current setting south-south-west; the which [he says] I did suppose to set between Busse Iland and Freseland, over with America." I will leave until later the consideration of the question as to what it can have been that Hall thus saw, or imagined he saw, and took to be Buss Island.

The next navigator to search for Buss Island was (so far as I know) Hudson, when on his third voyage in 1609. On June 2nd, he says³:—

[&]quot;At noone, we steered away west-south-west to find Busse Island, to see if it lay in her true latitude in the Chart or no. Wee continued our course, as before, all night. . .

[&]quot;The third, ..., we steered on our course, south-west by west, with a stiffe gale of wind. At noone, we observed and found our height to be 58 degrees 48 minutes. And I was before the ship 16 leagues, by reason of the current that held us so strong out of the south-west. For it is eight leagues in

¹ See ante, p. 24; also Purchas his Pilgrimes, vol. iii, p. 815.
2 See ante, p. 58; also Purchas his Pilgrimes, vol. iii, p. 822.
3 Purchas his Pilgrimes, vol. iii, p. 582; see also Asher's Henry Hudson, p. 49.
Asher also states (op. cit., p. clxix), that Knight, in 1606, sought for Buss Island; but of this we can find no record.

foure and twentie houres. We accounted ourselves neere Busse Iland. By midnight, we looked out for it, but could not see it."

Of the events of Button's voyage in 1612-13, we have only such a meagre account¹ that, even if he sought for the Island, it is not likely that we should have been told the fact; while Purchas has so abbreviated Baffin's narratives of his north-west voyages in 1615 and 1616 that we might expect nothing upon the point to

appear therein.

Munk, in the narrative of his voyage to Hudson's Bay in 1619,² makes no mention of having sought for Buss Island. Neither do Foxe and James, who sailed to Hudson's Bay in 1631; and both of them seem to have passed wide of its supposed position. That Foxe, at least, however, believed in the existence of the Island is certain, for he marks it on his chart, and, in repeating Hall's statement (see ante, p. 171) that he believed the Island was wrongly placed on the marine charts, he adds in a side-note the comment, "A great mistake"; whilst he appends to his account of Hall's supposed subsequent sighting of the Island, already mentioned (see ante, p. 171), another side-note, as follows, "Busse Isle again discovered."

After the date of Foxe's voyage, there is (as far as I have been able to discover) no record of anyone having either sought for or sighted Busse Island for nearly half a century. The absence of any records of search for the Island is largely accounted for by the fact that, after Foxe's time, voyages in search of a North-West Passage (which had been frequent in the beginning of the century) were suspended for nearly a hundred years; and, although the Island may have been sought by captains bound for Greenland, we cannot adduce actual records. Moreover, by no means all, even of those who passed near the supposed position of the Island (the real existence of which seems hardly to have been questioned at the time), would take the trouble to look for it; while, even of those who did so, few probably would think it worth while to note a fruitless look-out,—unless, indeed, they passed very near to, or actually over, its supposed position.

The next account we have of any one having looked for Buss Island is contained in the Fourth Book of Seller's English Pilot.⁵

¹ See Foxe's North-West Fox (1635), p. 117; also Miller Christy's Voyages of Foxe and James, p. 162.
2 See post, Book II.

³ Foxe's North-West Fox, p. 51.

⁴ Foxe's North-West Fox, p. 55; see also Christy's Voyages of Foxe and James,

p. 92.

b The English Pilot, . . ., by John Seller, Hydrographer to the King, Fourth Book (London, fo.,? 1673), p. 5. The only copy we have seen of what we believe to be the first edition is that in the British Museum (Press-mark, 1804, b. 7), which appears to be an incomplete proof. It is undated, having no title-page; but the Catalogue assigns it to 1671, probably because the Royal Grant of Exclusive Copyright for thirty years contained in it bears date "March 22nd, 1670-71". We believe, however (for a reason to be stated hereafter), that it cannot well be earlier than 1673. The maps mentioned hereafter appeared, we believe, only in this first

According to this, the Island was not only seen but partially explored, and a map of it made, in the year 1671, in the course of a voyage from Dunkirk, apparently undertaken for fishing purposes, under the command of a certain Captain Thomas Shepherd. The astonishing record in question reads as follows:—

"A Description of the Island Buss.

"This Island lieth in the Latitude of 58 deg. 39 min. It bears W. by N., half a point Notherly, from the Mizen-head, in Ireland, distant about 296

"This Island was first discovered in Sir Martin Frobisher's third and last Voyage to the North-West, in the Year 1578, by one of his Vessels that strai'd from his Fleet in their Home-ward-bound Passage, who accidentally discovered it, and called it after the name of the vessel, which was the Buss of Bridgwater, and therefore they called it Buss Island. They judged it to be about 25 Leagues long, lying the longest way S. E. and N. W. They found two Harbours in it; and, according to the account they give of it, that the greatest of them is about seven Leagues to the northward of the Southermost Point of the Island, [and that it is] called Rupert's Harbour; and [that] the other [Harbour is] four Leagues to the N. W. of that, [and is] called Shaftsbury's Harbour. There are two small Islands that lie off the East Point of the Island.

"This Island was further Discovered by Captain Thomas Shepherd, in the Golden Lion, of Dunkirk, in the year 1671, at the charge of Mounsier[s] Kiel, Spawlding, and Kicquerts, Lords of that Town. The said Captain Shepherd brought home the Map of the Island that is here annexed; and [he] reports that the Island affords store of Whales, easie to be struck, Sea-horse, Seal, and Codd in abundance; and [he] supposes that two Voyages may be made in a year. The sea is clear from Ice, unless in September. The Land [is] low and level to the Southward, and [there are] some hills and mountains on the N. W. The Variation was here, in the Year 1671, 9 degrees west. There lieth a Bank about 12 Leagues to the southward of the Island that hath good store of Fish upon it, and is about 15 Leagues in length, lying chiefly N.N.W. and S.S.E., having 40 fathom and 36 fathom Water upon it.

"This Island hath several times been seen by Captain Gillam in his Pass-

ages to and from the North-West."2

The narrative is accompanied by a large full-page map showing Buss Island and the Duke of York's Sand, which map is herein reproduced in facsimile.3 Buss Island is also shown, though on a small scale, on the General Chart of the North Atlantic, which

1 The statement that it was named Buss Island by the members of the crew of

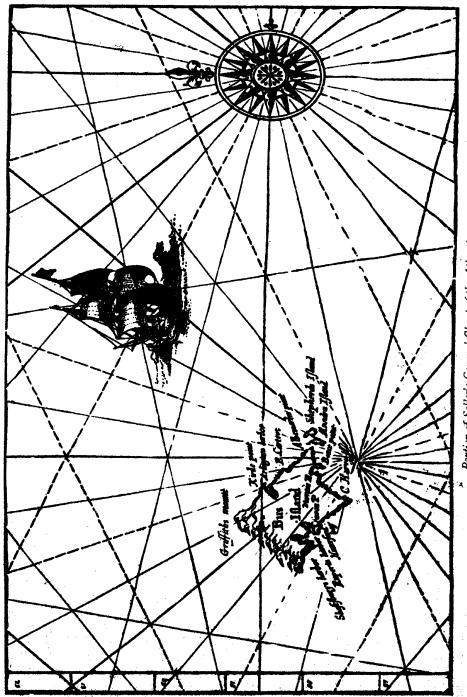
the "buss" is incorrect.

to have copies of this map printed off, for use herein, from the stone which had been prepared for use in his forthcoming work on the Zeno Question.

edition, though there are many later editions. That of 1689, however, contains the "Description" of Buss Island, the printed sheets of the edition being, apparently, merely a re-issue of the surplus stock left over from the first edition, but with a new title-page. The edition of 1728 and later editions contain neither the "Description" nor the maps in question.

² In 1671, Capt. Zachariah Gillam was in the Service of the Hudson's Bay Company. In 1668, he had made (see post) the first trading voyage to Hudson's Bay ever undertaken, which had led to the establishment of the Hudson's Bay Company. In his account of this voyage, there is a record of his having sighted an island not far from the position assigned to Buss Island, which fact is alluded to hereafter.

The Society is indebted to one of its members, Mr. F. W. Lucas, for permission



Portion of Seller's General Chart of the Atlantic.

is found in the *English Pilot* (a portion of which chart is also here reproduced in facsimile), but the names hereon differ somewhat from those on the larger map. As this narrative, and the maps accompanying it, will have hereafter to be fully considered in connection with the other records of the reported sighting of the Island, it is only necessary here to point out the significance of the names appearing on the maps.

Taking first the larger and more detailed chart, we find thereon twelve names, of which eleven are on Buss Island itself and the two small islands shown to the east of it, while one relates to a sandbank further south. These names, together with the persons from whom they have evidently been derived, are as follows, commencing from the south-west and taking them in order:—

""Viner's Point

Rupert's Harbour

Shaftsbury's Harbour

Craven Point

Cape Hayes

Kick's Ba y

Robinson Bay

Albermarle's Point

Arlington's Harbour

Munden's Island

Shepherd's Island

Duke of Yorke's Sand

On the smaller chart (which does not show the Duke of York's Sand), there are fifteen names of localities. Of these, eight are identical with those already given (namely Arlington's Harbour, Albemarle's Point, Shepherd's Island, Munden's Island, Cape Hayes, Cravon Point, Shaftesbury's Harbour, and Rupert's Harbour, though the last two are transposed, probably in error); while two of them are new names substituted for those indicating the same features on the other chart; and five are new names for localities not named at all on the other chart. The only locality which is named on the larger chart, but has no name on the smaller, is Kick's Bay.

The changed names appearing on the smaller chart are as follow:—

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"Warren Bay (= Robinson Bay)
Pt. Carew (= Vyner's Point)
?"
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The new names are:-

""" Griffith's Mount
"Kirke Point
"Point Carteret
Bence Point
"Hungerford Bay

Sir John Griffith, Kt.
John Kirke, Esquire
Sir Philip Carteret, Kt.
Sir Edward Hungerford, Kt."

¹ As, in 1671, this nobleman bore the title of Lord Ashley, and was only created Earl of Shaftesbury in April 1672, the appearance of the latter title here proves that this edition of Seller's *Pilot* cannot be much earlier than 1673.

² Afterwards King James II.

It will be noticed that, of the nineteen names of special localities on Buss Island, given above, those marked with an asterisk (no less than twelve in number) are obviously derived from persons who were named as Directors in the Charter of Incorporation granted to the Hudson's Bay Company on May 2nd, 1670. Of the remaining seven names of localities, one was named after the then Duke of York, as might very naturally be done; one was named after Captain Shepherd himself; and another (Kick's Bay) probably after the Mons. Kicquerts, of Dunkirk, who is mentioned in the narrative¹; while I am quite unable to account for the origin of the remaining four names (Munden's Island,² Warren Bay, Point Carew, and Bence Point), though some at least of these may have been named after Captain Shepherd's subordinate officers on board the Golden Lion.

Although the narrative clearly states that Captain Shepherd, at the time when he made the map in question, was sailing in the service of some French owners residing at Dunkirk, it can scarcely be doubted that he was the same Captain Shepherd mentioned by Oldmixon³ as being in the service of the Hudson's Bay Company, and in command of the *Shaftesbury*, a vessel belonging to the Company and spoken of as having made a voyage to Hudson's Bay in or about the year 1673. On that occasion, she sailed in company with another vessel belonging to the Company and commanded by the Captain Gillam who is mentioned by Seller (see above) as having previously sighted the Island. To this statement, I will next direct attention.

In the first edition of Seller's English Pilot, immediately following the "Description of Buss Island", appears "A Breviate of Captain Zechariah Gillam's Journal [of his Voyage] to the North-West, in the Nonsuch Catch, in the year 1668." The voyage in question was the first trading voyage (as distinguished from an exploring voyage) ever made to Hudson's Bay, and it resulted in the establishment of the Hudson's Bay Company. The account of it (which also appeared in many later editions of the English Pilot) commences as follows:—

"On the third day of June, he weighed from Graves-end, and on the thirteenth following, he saw fair Isle bearing N.E. by E., two Leagues off. . . . "The fourteenth day, Orkneys bore south, 18 Leagues off, and fair Isle, S.E.

"The fourteenth day, Orkneys bore south, 18 Leagues off, and fair Isle, S.E. by E., eight Leagues from them; and [he] steered away from Orkneys N.W. somewhat westerly.

¹ Oldmixon, however, mentions (*The British Empire in America*, London, 2 vols., 8vo, 1708, vol. i, p. 409) a "Samuel Keck, Esq., a master in Chancery", who may possibly have been the man after whom the bay was named.

As Mr. Foster has kindly pointed out, there was a Captain (afterwards Sir Richard) Munden, who, in 1673, when cruising with a squadron of the Royal Navy in the seas around St. Helena, recaptured that island from the Dutch (see Mr. F. C. Danvers' Report on the India Office Records, vol. i, 1887, p. 130). I am not however, aware that he had any connection with the Hudson's Bay Company.

3 Brit. Emp. in Amer. i D 400

"On the first day of August following, he saw Land bearing west from them, two miles off, and judged it to be an island, being dark and foggy weather, having sailed due west 524 leagues and a half, seeing many great Flocks of small Birds; and, in sounding, [he] found 120 fathom Water, the Land or Island (which he rather supposed it to be) bearing west miles from them, being in Lat. 59 deg. 35 min.

"The second of August, having still steered away west 528 leagues and a half, he saw a small Island, being then in the Latitude of 59 deg. 43 min.
"The third day, he saw the Land bearing from the W.N. W. to the S.W. by W., with one Island lying about four Leagues from the Main, being then in the Latitude of 59 deg. 34 min. . . . After six of the Clock, he ran N.W. by W. 3 leagues, and then W. by S. II Leagues, and then found his whole Westing 539 Leagues and a half."

There can, I think, be very little doubt that the foregoing records one of the "several" occasions upon which, according to Seller, Captain Gillam sighted (or thought he sighted) Buss Seller himself evidently believed that what Gillam saw on the occasion above described was Buss Island; for, alluding to the voyage in question, he elsewhere says1 that the ketch, "in her way, made the Land of Buss, lying betwixt Iseland and Groenland." Speaking of the island itself, Seller says (loc. cit.) :-

"Southwestward from Iseland, about 140 leagues, lyeth an Island called Buss, in the latitude of 57 degrees 35 minutes, not yet fully discovered, but only as it hath been accidentally seen by some, who upon other discoveries have occasionally passed those seas, as Captain Gillam in his first voyage to the North-West Passage had Soundings near unto it."

I will defer until later any expression of opinion as to what it was that Gillam really saw.

After the appearance of Shepherd's narrative and maps in Seller's English Pilot, the curiosity of geographers and the desire of navigators to find the mysterious Island were no doubt considerably increased; and, though actual records are not numerous, one cannot doubt that many a captain, both English and foreign, when passing the supposed situation of Buss Island, kept a sharp look-out for it. But no one was fortunate enough to catch a sight of it; and, before the middle of the eighteenth century (by which time voyages across the Atlantic, to America or Greenland, for purposes of exploration, colonisation, commerce, or fishing, had become tolerably and increasingly frequent), it had gradually come to be recognised that the Island then certainly had no real existence, whatever might have been the case previously. Yet it had been so long, so persistently, and so precisely marked as an island on the charts, that the fact of its former existence seems hardly to have been called in question; and it seems to have been generally concluded that the Island had become, in the course of time, submerged, from which it came to be commonly spoken of, and marked on the charts, as "The Sunken Land of Buss."

¹ Atlas Maritimus, or the Sea Atlas, etc., etc. By John Seller. (London, fo., 1675), p. 11.

This name appears to have originated in the inscription appearing on John Van Keulen's well-known chart of the Atlantic,1

which appeared in 1745.

With the commencement of the eighteenth century, Buss Island, as shown generally upon the charts, underwent a remarkable change. Up to this time, such charts as showed Buss Island at all showed it with little variation and in the manner already described. Even as late as the year 1693, "I. Bus" appeared in Le Neptune François (Paris) as an island of elongated shape, extending over about half-a-degree of longitude, and lying in lat. 58°10', long. 353° E. from Ferro (= 25° W. from Greenwich); while, in or about the year 1700, "Bus" appeared as a piece of indeterminate coastline, with a small island lying close adjacent to it, on a map entitled "Poli Arctici et circumjacentium terrarum descriptio novissima."2 The change in the conventional method of representing Buss Island seems to have been introduced by De l'Isle in his Atlas, which first appeared about the year 1720.3 On the map showing "l'Hemisphere Septentrional" therein, "Frislande" is shown as a nearly straight piece of northern coastline in lat. 61° and extending from long. 344° to long. 350° E. from Ferro (=long. 34° to 28° W. from Greenwich). There can be no doubt that this may be held to represent Buss Island, in spite of the erroneous latitude and the fact that a northern, instead of a southern, coast-line is shown; for it appears that De l'Isle regarded them as identical. Thus, on his "Hemisphere Occidental,"4 "Isle de Bus, ci devant Frislande" is shown as an almost straight southern coast-line in lat. 58°, and extending from long. 348° 30′ to long. 354° 30′ E. from Ferro (=29° 30′—23° 30′ W. from Greenwich).

It is not very easy to tell what it was which induced De l'Isle to introduce these new features, though a suggestion on the point will be found hereafter; but, once introduced, they remained and

were even extended by later cartographers.

On Van Keulen's Chart of 1745, Buss Island appears as a land with no northern extension, but with a long, irregular southern coast-line, extending over two degrees of longitude and a half (from 347½° to 350° E. from Ferro, which corresponds to from

¹ Nieuwe Wassende Zee Caart van de Noord-Oceaen, med een gedeelte van de Atlantische, etc., etc. (Amsterdam, 1745).

² In Frederic de Wit's Land Atlas (Amsterdam, c. 1700.)

³ Atlas Nouveau, contenant toutes les Parties du Monde, par Guillaume de l'Isle (Amsterdam, imp. fo., c. 1720). There are many later editions.

⁴ "Hemisphere Occidental, Dressé en 1720, pour l'usage particulier du Roy, sur les observations astronomiques et géographiques reportées la même année dans l'histoire et dans les mémoires de l'Academie Rle, des Sciences; Par Guillaume de l'Isle premier Géographer de Sa Majusté de la même Académie. A Austerdamie de l'Isle, premier Géographer de Sa Majesté de la même Académie. A Amsterdam: J. Covens et C. Mortier, [n.d.]." In a later impression of the same map, "corrigé suivant les dernières decouvertes par Covens et Mortier," both the island and the inscription are entirely omitted.

30° 30′—28° W. from Greenwich), and bearing this inscription in Dutch,¹—

"The submerged Land of Buss is now-a-days nothing but sur, a quarter of a mile long, with a rough sea. Most likely it was originally the great island of Frisland."

On Johan Anderson's Chart (published in the following year²), the Island is similarly shown in lat. 58° 30′, but with a much greater east and west extension. In this direction, the land indicated extends over no less than five degrees of longitude and a half (from long. 346° to 351½° E. from Ferro, which corresponds to from 32° to 26½° W. from Greenwich). There is also this inscription in Dutch, which is evidently abbreviated from that of Van Keulen³:—

"The submerged Island of Buss is now-a-days nothing but surf, a quarter of a mile, with a rough sea."

After this time, the representation of Buss Island on the charts became very uncertain. On some, it was still shown much as Hessel Gerritsz, had shown it in 1612; and of this type are the fine French charts of J. N. Bellin of 1751 and 1765. Others exhibited the Island much as it was shown on Van Keulen's Chart. Very many other charts of the period in question (among which we may mention those of Sanson, Jeffreys, and Palairet) did not show it at all, probably either because, as the Island was supposed to have been submerged, it was not thought worth while to show it, or because the greatly-exaggerated representation of Van Keulen had made later cartographers doubtful whether any such island could ever have existed at all.

Naturally enough, however, after the impression that the Island had become submerged became prevalent, many navigators passing the spot where it was supposed to have been made observations, by means of soundings or otherwise, to endeavour to obtain some corroboration of the general belief in its submergence, just as earlier navigators had looked out for the Island itself soon after its existence was reported.

Among the very earliest to do so was, I believe, the Captain mentioned by Anderson in 1746, of whom he says in German,4—

[&]quot; "'t versonkenen Land van Bus is hedendaags al branding \ mijl lang met hol water. Is wel=eer het Groote eijland Freesland geweest."

² In his Nachrichten von Island, Grönland, und der Strasse Davis (Hamburg, 1746, 8vo). There are also editions published in Copenhagen (1748), Amsterdam

^{(1750),} and Paris (? date).

3 "Het versonken Eyland van Bus is hedendaags al brandinge 1 Myl met hol

"The said skipper, on one occasion when he intended to slip through here, but could not, took much trouble to find the vestiges of the Sunken Land of Buss, which are clearly indicated on the charts, and spent above a couple of months in the vicinity, cruising around in all directions within 50 [German] miles. He found, however, no vestige of land, but everywhere a great depth. But he observed an inexplicable surf extending over a short distance, notwithstanding a depth of 100 fathoms; in consequence of which, the water in that place was higher than in the sea round about. He also saw water of a greenish colour, and a drifting mass of all sorts of green marine plants. Is it not the most probable hypothesis that there are in the sea-bottom hot springs which cause this elevation and disturbance of the water?"

Messrs. Verdun de la Crenne, de Borda, and Pingré, in their account of a voyage made in 1771-72, by order of the King of France, for the purpose of correcting the marine charts of the Atlantic, crossed the place where Buss Island (which they believed identical with Frisland) was placed in the charts, but without seeing the slightest vestige of it. Of its existence, they express themselves very doubtfully, as follows: 1—

"Nous en doutons, parce que nous ne voyons pas que l'existence de cette fle de Buss soit suffisament constatée; nous l'avons, cependant, mise sur notre carte, et pour sa position nous nous sommes conformeés à la carte de 1751 [i.e., Bellin's], position que nous regarderions, néanmois, comme très douteuse, même en admettant l'existence de l'île."

They do not actually state that they sounded upon the spot, but they may have done so.

Lieutenant R. Pickersgill, who accompanied Captain Cook upon one of his voyages, writing (as may be inferred) between 1776 and his death in or about 1780, declared his belief that both Frisland and Buss Island (which he evidently did not regard as identical) still existed; for, says he,² they could hardly have become submerged "without so violent a concussion as must have affected the north of Europe". He goes on to say that if the latter Island could be again discovered, it would probably prove "preferable to Newfoundland for its fishery. . . Besides, [he adds] our ships bound to the north might winter there, and it might prove a nursery for hardy seamen." Next he declares his belief that one reason why Buss Island had never been sighted by recent navigators was that, having been marked on Van Keulen's Chart (by which, he says, the Greenland voyages were then regulated), "the seamen, in consequence, instead of endeavouring to discover, use all the means in their

achtet, eine unbegreisliche Brandung, wodurch das Wasser daselbst höher, als auf der See rings umher gestanden, und ein grünliches Wasser nebst einer treibenden Menge von allerley grünen Seekraute bemerket. Ist nicht die wahrschein-lichste Vermuthung das in Grunde heisze Spring-Quellen seyn werden die diese Erhebung und dieses Gekräusel des Wassers verursachen?"

[\] Voyage fait par Ordre du Roi en 1771 et 1772 (Paris, 2 vols., 4to, 1778), vol. ii. p. 360.

² A Concise Account of Voyages for the Discovery of a North-West Passage, ... By a Sea Officer (London, pott 8vo, 1782), pp. 32-38. This anonymous work was published posthumously.

power to avoid, it." Finally, in support of his belief in the continued existence of both Frisland and Buss Island, he makes two quotations. The first (which relates to Frisland) does not here concern us, but the second (which relates to Buss Island) is as follows :---

"A master of a Greenland-man (called the British King) once told me that, being by his reckoning near that place, he was alarmed by breakers, and, sounding, found at 59 fathoms depth, a rocky bottom. He also says that many vessels had seen breakers thereabout, and that a Dutch ship had her quarters almost beaten in by them, and returned home, being in great danger of sinking."

On the 29th of June, 1776, Lieutenant Pickersgill himself, when commanding H.M. Brig Lion on a voyage to Davis Strait, sounded (as he thought) on the site of the submerged Island, and obtained depths of from 290 to 320 fathoms. His account of the matter—the only authoritative one ever published, so far as I have been able to discover—is as follows:1—

"June 28th, moon.—Lat. 56° 38'. Long. by last observation, 17° 44'; by

ship's reckoning 22° 20'.

"June 29th, 3 P.M —Calm. Tried soundings, and got ground at 230 fathoms; drifted to the N E. about 2 miles, and sounded again in 290 fathoms; fine, white sand. At the same time, saw a shag, gulls, and other signs of land not far hence. By running about 19 miles N.E. by N., lost soundings; so bore away, calling it the 'Lion's Bank'."

It will be noticed at once that, in the foregoing, nothing is either stated or implied as to the exact position in which these soundings were taken. That Pickersgill did not make any actual observations as to the position may be inferred from the fact that in his work already mentioned, speaking of Buss Island, he says:2 "I have sounded when near it by computation, and make no doubt but that, if I had had time (as I had evident tokens of land), I might have discovered it."

Sir John Barrow (who, as Secretary to the Admiralty, had access to Pickersgill's own manuscript journal, from which he prints extracts) says³ that the position was lat. 57° N., long 24° 24′ W., which cannot be made to agree with Pickersgill's own published statement, and is rather to the southward, and five or six degrees to the eastward, of what may be called the mean position of Buss Island on the old charts.

Shortly afterwards, Dr. Alexander Fisher gave⁴ (probably on the authority of Barrow, as he mentions no other source of information) the same figures for the position where Pickersgill sounded, though he suggests that Pickersgill was in error as to his longitude,

8vo, 1818), p. 321.

4 Journal of a Voyage of Discovery into the Arctic Regions, 4th ed. (London,

¹ Philosophical Transactions, vol. lxviii, pt. 2 (1779), p. 1057.

² A Concise Account, etc., (1782), p. 37. 3 A Chronological History of Voyages into the Arctic Regions (London, dem

being evidently inclined to think that Pickersgill had really sounded on the site of the submerged Buss Island, which he knew

was supposed to lie further west.

Yet another statement (I know not whence derived) as to Pickersgill's position when he sounded on July 29th, 1776, is given in Admiral Vicomte de Langle's report to the French Geographical Society,1 in which it is stated to have been in lat. 56° 42′, long. 19° 50′—20° 05′ W. from Paris (=17° 30′—17° 45′ W. from Greenwich).

On the whole, it seems very doubtful whether Pickersgill did. really sound either on or near to the supposed site of Buss Island. All the three different positions assigned above lie to the east of that site; and, although all three also lie to the west of any part of Rockall Bank, it seems most probable that what Pickersgill sounded upon was really a portion of that Bank, as has been already suggested by Captain Vidal.

Purdy, speaking of the "Lion's Bank" of Pickersgill (whatever it was) says:2—"This bank is said to have been sounded on, a few years since, by Captain Richmond of Greenock." On this, how-

ever, I have no further information.

It is stated in the Report on the Shallows and the Vigies of the Atlantic,3 drawn up in 1865 for the French Geographical Society, that Buss Island (which is therein regarded as identical with Frisland) was "vainement recherchée par les officiers francais (Annales Maritimes, t. xii, p. 23)"; but I have been unable to follow up the reference here given, which seems to contain some error. These "French officers" may have been Messrs. De la Crenne, De Borda, and Pingré, already alluded to.

After the commencement of the present century, when a more scientific spirit of inquiry concerning all matters of the kind had begun to appear, several well-equipped exploring expeditions, when passing the supposed site of Buss Island, took the trouble to sound, in order to ascertain the depth to which the Island had been submerged, if such had been its fate. The narratives of

several of these must be noticed.

Captain Sir John Ross, when on his voyage to Baffin's Bay, in 1818, writes as follows under the date of May 17th:4-

"At noon, we found ourselves exactly in the latitude of the sunken land of Buss, as it is laid down in some charts, 57° 28' N.; and, being desirous of determining whether such a bank really existed in long. 29° 45', we altered our course, being then in 28° 20', to N.W., for the purpose of ascertaining the

¹ Rapport sur les Hauts-Fonds et les Vigies de l'Ocean Atlantique; . . ., par le Contre-Amiral Vicomte de Langle. Paris (Bulletin de la Société de Géographie), 1865, p. 26.

² Memoir on a Chart of the Northern Ocean, 9th ed. (London, 8vo, 1845),

p. 444, and 10th ed. (1853), p. 448.

Rapport sur les Hauts-Fonds, etc., p. 26.

Voyage of Discovery. . . for the Purpose of Exploring Baffin's Bay (London, 4to, 1819), pp. 25-26.

fact. We made all sail ahead, kept a good look-out, with the lead constantly going; and, at sunset, being near the spot, shortened sail and hove to in order to sound, but found no bottom in 180 fathoms. This was repeated every four miles, but with no better success; and, when the Alexander came up with us (being then thirty miles past the spot marked out for this sunken bank), we

made sail, but kept the lead constantly going.

"The existence of this bank has long been doubted by the masters of Greenland-men, and certainly it is not to be found where laid down in the charts. Various stories respecting it were related by people on board; but it appeared, on comparing their testimonies, that no soundings had ever been actually found. I am more inclined to imagine that, when ships have been struck in this quarter with heavy seas, the shocks have erroneously been attributed to the Sunken Land of Buss.

"Early next morning, the weather was fair....We continued our soundings, but without finding ground, and held on constantly in the same parallel of

latitude."

In the year following (1819), Sir William E. Parry, when outward bound upon his voyage in search of a North-West Passage, wrote as follows:

"On the 27th [of May] we cast off the *Griper*, and hauled a little to the northward, in order to pass near the spot where Lieutenant Pickersgill obtained soundings, from 320 to 330 fathoms, on the 29th of June, 1776²; and, at 6 p.m., being in lat. 56° 59′ 39″, and longitude, by chronometers, 24° 33′ 40″, the deep-sea clams were sent down with one thousand and twenty fathoms of line, without finding bottom...

"...At half-past I p.m. [on the 30th], we began to cross the space in which the 'Sunken Land of Buss' is laid down in Steel's Chart from England to Greenland; and, in the course of this and the following day, we tried for soundings several times without success, the ship's position being as follows:

Lat.				Lon	g.	Fathoms.		
	'' 57°	46′		29°	ັ20′	•••	160	
	57°	49'		29°	22'	••	90	
	58°	02'		29°	32'	•••	80	
	58°	07'		29°	34′		85	
	58°	14'		29°	46′		100	
	58°	τ3'	•••	ദര്	52'		170."	

Alexander Fisher, M.D., who also published an account of the same voyage, gives some further information upon the subject. He says:3—

"[May 27th, 1819].—This afternoon, the weather being almost perfectly calm, we availed ourselves of the opportunity of trying for soundings on the supposed 'Sunken Land of Buss', according to its situation by Lieutenant Pickersgill, who, in his passage to Davis' Straits, in the year 1776, struck soundings with a line of 320 fathoms in the very place where we happened to get becalmed this afternoon'; but, strange to say, although we had 1,120 fathoms of line out, we found no bottom. It ought not to be inferred from

¹ Journal of a Voyage for the Discovery of a North-West Passage . . . in the Years 1819-20 (London, 4to, 1821), pp. 4-5.

See ante, p. 181.

3 Journal of a Voyage of Discovery to the Arctic Regions, etc., 4th ed. (London, 8vo, 1821), p. 15.

⁴ He asserts in a foot-note that the position in which Pickersgill sounded was lat. 57, long. 24° 24′ W.; but, as already stated, we do not know definitely on what authority he says so.

this, however, that the bank on which that officer sounded does not exist; for it is more reasonable to suppose that he might be mistaken in his longitude of the place than that the existence of the bank itself should be questioned, more especially as some of our latest charts (by Steel) lay the Sunken Land of Buss down several degrees to the westward of where we sounded to-day."

Later on he says1 that on the 30th and 31st (on the latter date, apparently in lat. 58° 13', long. 30° 20' W.) they sounded again

"with 160 fathoms of line, but found no bottom. The object for sounding on this occasion was [he adds] to ascertain whether a bank exists in the place where the 'Sunken Land of Buss' is laid down on Steel's Chart; but our researches here, as on Pickersgill's bank, have been in vain. So that I think the existence of any remains of [the] Buss's Land (if ever there was such an isle) may now be justly questioned. At all events, hydrographers may with perfect safety henceforth expunge from their charts all traces of it in either of the places hitherto assigned."

In 1828, Captain W. A. Graah, when on his voyage from Denmark to Greenland in search of the Lost Colonies, passed the reputed site of the Island. He says:3—

"On the 25th [of April, 1828] we passed what is laid down in the charts under the name of the 'Sunken-Land-van-Buss',-a danger made mention of even in the latest English sailing directions, but which mariners may now be assured is altogether an imaginary one."

Although Graah does not say that he sounded, one may infer that he did so.

Finally, Sir John Ross, in his account of his second voyage in search of a North-West Passage, says4 that on the 22nd of June, 1829,

"at an early hour in the morning, we passed the spot marked in the chart as that where Pickersgill sounded in 300 fathoms. The state of the weather did not, however, permit us to repeat this trial at so great a depth."

This is the last occasion, as far as I know, on which anyone made an attempt to discover traces of the lost Island.

It is necessary to add, however, that, even after the theory that Buss Island had become by some means submerged had obtained general acceptance, it did not at once disappear from the charts, for it lingered thereon (as has been said) right down to our own The latest on which I have been able to find any trace of it is that of Europe in the 1856 edition of Keith Johnston's Physical Atlas, whereon it appears, without query of any kind, as a minute speck, in about lat. 57° N., long. 25° W. It may, however, be observed that, although the last lingering belief in the existence of any such island as Buss Island has long since disap-

¹ Op. cit., pp. 17-18.

2 Which he clearly regards as not lying in the position assigned to Buss Island.

3 Narrative of an Expedition to the East Coast of Greenland, sent by Order of the King of Denmark in search of the Lost Colonies, under the Command of Gapt.

W. A. Graah, translated from the Danish (London, demy 8vo, 1837), p. 20.

4 Narrative of a Second Voyage in Search of a Narth-West Passage during the Years 1829-33 (London, 4to, 1835), p. 36.

peared, many pieces of evidence might be adduced to show that, among scientific men and others who have occasion to consider the question of the possible former existence of land in the middle of the Atlantic, few seem to entertain any doubt as to the former existence of Buss Island. Even so lately as the year before last, no less high an authority than Prof. Hull seemed to accept without hesitation the fact of its former existence, if one may judge from the manner of his allusion to it.¹

I have now traced the history of Buss Island, as it appears on our maps and charts, from its reputed discovery in the year 1578 to the present day. That no such Island now exists is certain, and I may therefore proceed to consider the various hypotheses upon which it is possible to account for the reports of the discovery and sighting of the Island if it never existed, or for its disappearance if it ever did exist. These hypotheses appear to be limited to four in number, and are as follows:—

- (I.)—That the statements of any such land having been sighted have not been made in good faith, and are, in fact, fraudulent inventions.
- (II.)—That the statements of land having been sighted rest on a mistake, either a fog-bank or a gigantic ice-field having been sighted and mistaken for an island.

(III.)—That an island really was discovered in the position

indicated, but that it has since become submerged.

- (IV.)—That some real and still-existing land was seen, but not recognised as land previously known, and was, therefore, thought to be a new discovery.
- (I.)—In the first place, therefore, we have to consider whether it is not possible that the whole account of the discovery in 1578 of an island in the middle of the Atlantic, since called "Buss Island", may have been a fraudulent invention—whether the crew of the little "buss", having been deserted (as they thought) by the rest of the fleet without due reason, may not have invented a wonderful tale of their having discovered a large island, merely out of pique, and in order to "get the better of" those they thought had deserted them.

Although there are reasons which go some way to support this view, I do not myself think it probable. Wiars's narrative seems to me altogether too detailed and too circumstantial to admit of any doubt that he and his companions really did sight some land. Had he been concecting a story, it seems probable that he would have thought it wiser, instead of stating the latitude with precision, to leave it more or less vague and uncertain,

¹ Contributions to the Physical History of the British Isles, etc., and ed. (London, 8vo, 1895).

so that those who he might have been sure would look for the Island afterwards might have the greater difficulty in proving his deceit. Another argument of the same nature may be mentioned in favour of this view. Wiars does not, in his narrative, propose any name for the new island which he says he and his companions discovered was a name "Buss Island"—the Island the "buss" discovered—was a name by which it was spoken of by others afterwards. If the crew of the little vessel had conspired together to spread a false report of the discovery of an island, it seems hardly likely that they would have resisted the temptation of giving that island a name—unless, indeed, we credit them with greater subtlety than they probably possessed; yet, as we have seen, they proposed no name.

Nevertheless, it may be worth while to mention that those on board the "buss", when on their homeward voyage, may have sighted a real island which, though not then marked upon the charts, lies in the Atlantic in almost exactly the latitude ascribed by Wiars to Buss Island. I allude to Rockall, which lies in lat. 57° 36′ N. Though now nothing more than an isolated pyramidal granite rock, rising straight out of the water, with neither soil nor sand around it, there is reason to believe (from the evidence of old charts) that not only was the rock itself considerably larger in the seventeenth century, but that it was also surrounded by a sand-bank of greater or less extent. It is not an altogether unreasonable suggestion, therefore, that the sight of this very remarkable islet may have put into the heads of Wiars and his companions the idea of claiming to have discovered an island, and that, in reporting it, they enormously and fraudulently exaggerated its size and very erroneously stated its longitude. do not, however, attach the least importance to this view; for, although I have declared my belief that real land of some kind was sighted, it is quite certain, from the information given, that that land could not have been Rockall. The size, the off-lying ice, and the position assigned to Buss Island, are more than sufficient to prove that it can have had no connection whatever with Rockall.

There seems no reason, therefore, to doubt the perfectly bond fide nature of Wiars's narrative; nor does there seem to be any greater reason to doubt that Hall, on his outward voyage in 1606, really saw something and that he believed it to be Buss Island; and I shall hereafter suggest what I believe that something to have been. But, as regards the very remarkable account in Seller's English Pilot, I believe the matter stands differently. This I am inclined to regard as a pure invention, concocted by a rascally captain who hoped to secure either a pecuniary reward or meretricious renown by claiming to have actually discovered and explored an island which had long been represented on the Charts (but of which nothing was otherwise known), and to have

named after the chief of his employers a number of non-existent headlands, bays, and harbours thereon. It will be noticed that, although no less than nineteen localities were named and depicted on the Chart, nothing is said as to the reported island having been landed upon; while the narrative (though in some respects apparently genuine) is, on the whole, suspiciously hald and unconvincing, in which respect it differs widely from that of Wiars. We are not told the precise date on which Shepherd sighted the reputed island; nor are we told, from his own observation, its exact position; while we are left equally in the dark as to the circumstances under which Shepherd came to encounter the island and how long he remained in its vicinity. That, shortly after the first appearance of his narrative, it was suspected to be spurious seems to be proved by the fact already stated that, in succeeding editions of the English Pilot, the maps did not appear, though the "Description" continued to form part of the letterpress through several editions, for which the same printed sheets were apparently made to serve, without alteration. Nor did the maps appear in the first edition of Seller's Atlas Maritimus (1675).1 On the whole, therefore, I think that Shepherd's account may be dismissed at once from further consideration, as being mainly, if not wholly, spurious. It is just possible that Rockall may have in some way suggested the fraud to Shepherd: a surmise which is to some extent supported by the mention of a bank to the southward with many fish upon it; but into this it is useless to inquire very closely.

(II.)—The supposition that what was sighted by those on board the little "buss" on September 12th, 1598, was in reality nothing more than an immense ice-field, which they mistook for an island, has already been advanced by several writers who have considered the question. Nor is this solution of the difficulty in itself by any means impossible, for it is certain that such ice-fields are at times met with in the part of the Atlantic with which I am concerned.

Dr. Asher, in discussing the subject, says²:---

"An immense icefield seems to have floated out of Davis Strait, down to lat. 57°. The excited fancy of a passenger on board the vessel [that is, the 'buss' *Emmanuel*] mistook it for an island, and the island soon found its place on maps and charts under the name of *Busse Island*."

Mr. E. J. Payne also appears to regard this hypothesis as that

In some later editions, however, we find "a Mapp of the Regions and Countreyes under and about the North Pole", on which Buss Island is shown with nine names thereon, much as it is shown on the General Chart in the English Pilot. This map is undated, but the date 1676 appears incidentally thereon. I believe, however, that the map was engraved earlier than this, at a time when Seller believed the story which Shepherd had told him about Buss Island, and we think that the legend containing the date above mentioned is a later addition.

Hinry Hudson, the Navigator, p. cix (see also p. clix).

which most satisfactorily solves the problem. He observes that the theory of

"floating ice appears to afford, on the whole, the best explanation of the difficulty. Packs of floating ice much larger than the supposed island, which was estimated to be 25 leagues long, are sometimes observed in these seas."

Sir John Richardson concludes² that Buss Island may have been "a congeries of icebergs".

Crantz, in speaking of the huge ice-fields occasionally met with in the Greenland seas, says: "-"Such a field of ice, at the first appearance, presents a prospect resembling a country with hills and valleys, towns and villages, houses, churches, and towers."

Many instances of ice-fields having been taken for land in the

north-western seas might be cited.

Captain William Barron says4 that, on one occasion, when near Cape Hooper in Davis Strait, the officer whom he had left in charge on deck

"called down the cabin that the vessel was close to the land. The ship was immediately put about and the boat lowered. We could not account for being so near; as, by our calculation, we ought to have been forty miles from it. Taking a gun with me, I pulled towards the supposed land, and found it to be a large sconce of heavy ice, covered with gravel, sand, and large stones, some of which would weigh upwards of a ton. This piece of ice must have been attached to the land under a perpendicular cliff. . . . This large piece of ice (or, as it may be termed, a floating island) was about one mile in circumference and twenty-four feet thick."

Then there is the suggestion that a fog-bank may have deluded the sailors into the belief that they saw land, as many other sailors have been deluded. Many and many a sailor, especially when sailing in the region in question, has been so certain that he saw land that he has put off to it in his boat, only to find, as he approached it, that he had been deceived by a fog-bank. cannot cite a more pertinent instance than that of our own Captain James Hall. He says that, on the morning of June 5th 1605, the weather being fair, and he being in the southern part of Davis Strait, "Some of our people supposed they had seen the" land. Our Captaine and I went aboord the Pinnasse, when, after an houre of our being there, we did see the supposed Land to be an hasie fogge, which came on vs so fast that we could scarce see one another."

Numerous similar passages might be cited, but I will limit myself to four more. The first gains additional interest from the fact that it was observed very close to the reputed site of Buss.

¹ Voyages of the Elizabethan Seamen to America, 2nd Ed. (Oxford, cr. 8vo, 1893), p. 192.

2 The Polar Regions (Edinburgh, dy. 8vo, 1861), p. 87.

3 History of Greenland (London, 2 vols., 8vo, 1767), vol. i, p. 31.

4 Old Whaling Days (Hull, cr. 8vo, 1895), pp. 122-123.

5 See p. 30; also Purchas his Pilgrimes, vol. iii, p. 819.

Captain William Barron, whom we have already cited, in his account of his whaling voyage to Davis Strait in 1861, says1:-

"During our passage towards Cape Farewell, we fell in with many icebergs in lat. 58° N., long. 44° 10' W. The day was beautiful and clear, and the clouds near the horizon to the northward appeared so much like the land, with its snow-capped mountains, that any experienced person might easily be deceived, although we knew the land to be about one hundred and ten miles distant. When such clouds appear, they are called 'Cape Fly-away' by the sailors."

"The Clerk of the California", in his account of a voyage across the Atlantic, writes as follows2:-

"The twenty-ninth [of June 1746] was a clear beautiful day, with sunshine and little wind. In the morning, we had a Fog Bank, E.N.E., much resembling land. Several of them arose in other parts of the horizon in the afternoon. These Banks will stagger a good judgment to discern, in places where Land may be expected, whether they be Fog Banks or the real land, especially as such Banks will often, from the sun's reflection, appear white in spots, resembling snow on the mountains so usual in these parts. To distinguish whether it be a Fog Bank or Land, you carefully observe whether there is any alteration of the form or shifting of the outlines; which, if there is, as it is not the property of Land to change the form, you know it to be one of these Banks.

The third account to be cited is as follows:—Mons. de la Boullaye le Gouz relates³ that, when approaching the coast of Ireland, between Wicklow and Dublin, on the 14th of May, 1644, "certain vapours" arose from the sea, which appeared like land two or three leagues off, with trees and cattle thereon. then states that he sought information about this land from a Dutch pilot residing in Dublin, who replied:—

"You are not the first who has erred in the supposition of these things. The most expert navigators are often deceived by them. That which to us appears land is only a dense vapour, which cannot be raised higher in consequence of the season and the absence of the sun. Those apparent trees and animals are a part of that miasma, which collects in some places more than in others. When very young, I was on board a Dutch vessel off the coast of Greenland, in 61° of latitude, when we perceived an island of this sort. We sounded, without touching the bottom. Finding sufficient water, our Captain wished to approach nearer; but we were astonished that, all at once, it disappeared. Having a different direction, we met the same appearance again. The Captain, desiring to know what it was, ordered them to turn half-a-mile backwards and forwards to observe it; and, after having traversed many times without finding any real land, there arose so furious a tempest that we expected to perish; and, a calm afterwards coming on, we asked the Captain why he had surveyed this island. He told us that he had heard say that, near the Pole, there are many islands, some floating, some not, that are seen from a distance and are hard to be approached; which, they say, is owing to the witches who inhabit them, and destroy by storms the vessels of those who

A.D. 1644, edited by T. Crofton Croker, (London, demy 12mo, 1837), pp. 3-4-

¹ Old Whaling Days, p. 128. ² Account of a Voyage for the Discovery of a North-West Passage, etc., performed in the Years 1746 and 1747 in the Ship California, Capt. Francis Smith, Commander (London, two vols., demy 8vo, 1748), vol. i, p. 13.

³ The Tour of the French Traveller, M. de la Boullaye le Gouz, in Ireland, in

1819), p. 4.

obstinately seek to land upon them; that all he had heard reported and [had] read were but fables; that he now knew that these floating islands proceeded from the vapours raised and afterwards attracted by the planets, which vapours the wind dispersed on approaching nearer; and that tempests usually followed these phenomena."

Fourthly, Dr. Thomas M'Keevor thus describes² an experience he and his companions underwent in that very portion of the Atlantic in which Buss Island was formerly believed to lie —

"Sunday, July 12th [1812].—Weather very thick and hazy, accompanied with constant drizzling rain. Wind continues fair. The air feels very cold, owing (as the Captain suspects) to our being near ice. About half-past one, the man at the helm said he saw land. Owing to the very unfavourable state of the weather, we remained for a considerable time in suspense. The Captain did not think that this could possibly be the case. At length, however, from its very striking appearance, he was induced to send for his telescope. It is still rather doubtful. If land, he thinks it must be Cape Farewell, in which case we are 200 miles behind where we supposed ourselves to be. In the end, it turned out to be merely what the seamen call a Cape Fly-away."

Both of the foregoing hypothetical solutions of the question as to what the so-called "Buss Island" can have been (namely, that it was either an ice-floe or a fog-bank), are far from being in themselves unreasonable; but Wiars's account is so circumstantial that I prefer to believe that real land of some kind

¹ In the original edition (Les Voyages et Observations dv Sieur de la Boullayereads as follows:—"Le soir, certaines vappeurs qui s'esleuoient de la mer me faisoient croire que c'estoit de la terre laquelle ie voyois à 1, 2, & 3 milles, et m'imaginois distinguer les arbres en grand nombre, et mesme des bœufs, m'arrestant à voir cette terre, et a en demander le nom et qu'elles villes il y auoit, ie m'addressé à vn pilote Hollandois, marié a Doublin, lequel me desabusa & me rint ce discours: Vous n'estes pas le premier qui a erré dans la speculation de ces choses. Les plus experts dans la Nauigation s'y trompent souuent. Ce qui nous semble terre n'est qu'vne vapeur grossière qui ne peut estre esleuce dauantage à cause de la saison & de l'esloignement du Soleil; ces arbres et ces animaux apparens sont partie de cette vapeur, laquelle s'amasse plus en vn lieu qu'en l'autre. Je vous diray qu'estant extremement feune sur vn vaisseau de Hollande vers la coste de Groenland à 61 degrez de latitude, nous apperceumes vne Isle de cette sorte, et iettasmes la sonde sans trouver de fond. Nostre Capitaine voulut en approcher de plus prez, et trouvans assez d'enu nous fusmes estonnez que tout d'vn coup elle disparut et nous estans esloignez de l'autre costé nous la descouurismes derechet. Le Capitaine voulut sçauoir ce que c'estoit commanda que l'on tournast vn demy mille tout au tour pour l'obseruer; et, apres l'auoir tournée diuerses fois sans trouuer aucune veritable terre, il s'esleua vne tempeste si orageuse que nous pensasmes perir; et, le calme estant venu ensuite, nous demandasmes à nostre Capitaine pourquoy il attoit fait mesurer cette Isle. Il nous respondit qu'il auoit ony dire que, vers le Pole, il y auoit plusieurs Isles, les vnes flottantes, les autres non, que l'on voyoit de loing, et desquelles l'on auoit peine d'aprocher. Ce que l'on disoit aduenir par des femmes magiciennes qui les habitent et font perir par la tempeste les vaisseaux qui s'oppiniastrent à les vouloir aborder ; que tout ce qu'il auoit leu et ouy dire n'estoit que fables, et qu'il connoissoit à present que ces Isles flottantes promenoient des vapeurs leuces et attirées par les planettes, que la veue dissipoit lors qu'on en approchoit de prés, et que la tempeste suiuoit ordinairement ces metheores. Je le remerciay de m'auoit donné la raison de cette terre imaginaire," etc. ² A Voyage to Hudson's Bay during the Summer of 1812 (London, demy 8vo,

was seen by those on board the little "buss". It is not probable that the crew would have continued for the greater part of two days within sight of either an ice-field or a fog-bank which they had mistaken for land, without discovering their error. I see reason, therefore, to entirely reject this hypothesis—or, rather,

these hypotheses—as wholly untenable.

With Hall's supposed sighting of the island in 1606, however, I think the case may be different. Hall's statement that he saw the island is very cursorily made, proving that, whatever he saw, he saw it imperfectly from a distance; and I think there can be very little doubt that what he saw on this occasion was either an ice-field or a fog-bank, probably the latter. This is the more likely to have been the case from the fact that Hans Bruun, who was with Hall, says nothing at all about the matter in his diary kept on the voyage, except that, on this day, they saw the first ice. Probably, therefore, they recognised that whatever they saw was not real land. We know, moreover (as just mentioned²), that Hall, on his voyage in the previous year, had actually been thus deceived, and had mistaken a fog-bank for an island in the very region in which Buss Island was supposed to lie.

This, too, I believe to be the hypothesis upon which it is most easy to account for Gillam's supposed sighting of Buss Island. It will be seen from his narrative that, leaving the Orkneys on July 14th, 1668, he "sailed due west 524 leagues and a half", and, on August 1st, in "dark and foggy weather", and in lat. 59° 35′, he saw land to the west, two miles off, which he took to be an island. The latitude given is somewhat more northerly than that commonly assigned to Buss Island at the time; but it was no doubt thought near enough. If, however, his statement that he was 524½ leagues west from Orkney was correct, he cannot have been anywhere near the reputed site of Buss Island; for that would bring him into about long. 50° W. This, together with his soundings, may, however, be dismissed from further consideration here; for, whatever he saw, it certainly had no connec-

tion whatever with Buss Island.

(III.)—It is quite certain that, if Buss Island ever did exist in the position assigned to it, it does not exist there now; but it does not necessarily follow therefrom that such an island never did exist.

In the face of such statements concerning the island as those which have been cited, none but a very indolent historical student would, at once and off-hand, dismiss as pure fabrications the reports of its discovery in 1578, and of its having been sighted on several later occasions. The only safe and proper course in all such cases is to follow the text of any old narrative, and to accept

² See p. 188.

the statements contained therein, however apparently improbable, until more or less clear and direct evidence is obtained either of unintentional error or deliberate deception. Let us inquire, therefore, whether any such evidence is obtainable in the present instance.

It has been already shown that, when many navigators had sought for Buss Island in the place indicated by Wiars and Shepherd, and when all of them had failed to find it there, the conclusion generally drawn was, not that the island had never existed, but that it really had formerly existed, and had, in some manner (most probably, it was thought, by means of volcanic action), become submerged; from which it came to be quite generally spoken of as "The Sunken Land of Buss". I have also shown the means by which some of the more intelligent, captains sought to put this theory to the test, and the present is the proper place for the captains the result obtained by their soundings.

us to consider the result obtained by their soundings.

It should be noticed, in the first place, that, out of the six records of actual soundings already quoted, no less than four state that soundings were really obtained-namely, those of Gillam (1668) 120 fathoms; the skipper mentioned by Anderson (before 1746) 100 fathoms; the English captain mentioned by Pickersgill (before 1776) 59 fathoms; and Pickersgill (1776) 290-320 fathoms. Of these four, however, I may at once dismiss two from further consideration; for I have already adduced evidence which seems clearly to prove that, whatever Gillam and Pickersgill thought when they made their soundings, those soundings were not really made either on or near the reputed site of Buss Island. Of the remaining two, it may be observed that they both give In neither case are we told either the second-hand information. name of the captain concerned or the date when he made the sounding in question; while we are given no precise information by means of which we may satisfy ourselves that the soundings really were made on or near the reputed site of Buss Island. Both the so-called soundings were, moreover, made in the earlier part of last century, when the means of obtaining accurate soundings and of ascertaining position at sea were very imperfect. I think, therefore, that one is fully justified in rejecting both of them, and in concluding that some mistake was made, either in the sounding itself or in the position in which it was made. significant that the careful soundings made in the beginning of the present century by the well-equipped expeditions under Ross and Parry could not corroborate the earlier soundings, although the means of taking soundings had been then greatly improved. The evidence of soundings seems to me, therefore, rather against than in favour of the theory of submergence.

In addition to these older navigators and geographers, many recent (or comparatively recent) writers of excellent repute have given credence to the reports of the former existence of Buss

Island, and have accepted the theory of submergence to account for its disappearance.

Among the chief of these, I may mention the following:-

The remarks of MM. Verdun de la Crenne, de Borda, and

Pingré seem to imply that they held this view.1

Forster observes that, "if the Buss of Bridgewater really and bonâ fide found an island . . . in 57 deg. 30 min. N. lat., it must have sunk afterwards into the sea, as it has never been seen again in the voyages made since to Hudson's Bay, Greenland, and Labrador."

Crantz also seems to accept the theory of submergence; for in speaking of Frisland, he alludes⁴ to the theory held by some that it "has been swallowed up by an earthquake, and is the same with the Sunken Land of Buss marked on the charts, which is dreaded by seamen from the shallowness of the incumbent waters and the furious dashing of the waves."

The same may also be said of Graah, who says⁵ that, although the danger of the "Sunken Land of Buss" is mentioned, even in the latest English sailing directions, "mariners may now be assured [that it] is altogether an imaginary one".

Purdy speaks of the Island of Buss as "sunken near 58° deg. N. and 33° W.", and includes it among "imaginary shoals, . . . formerly described, but now omitted from a conviction of their non-existence".

Wallich, in his important though incomplete memoir on the Atlantic, argues strongly and at considerable length in favour of the former existence of land in the position where Buss Island used to be marked on the charts. He holds⁷ that the existence of a ridge or elevated plateau in the bed of the Atlantic in the place indicated (then recently discovered, but now well known, and to be noticed hereafter) strongly confirms the old records of the former existence of land (Frisland, as well as Buss Island) at the same place. To account for the disappearance of this land, he urges that the subsidence of the tract under notice may have resulted from volcanic action in the region of which Iceland is

¹ Voyage fuit par Ordre du Roi en 1771 et 1772, . . . par MM. V. de la C., de B., et P. (Paris, two vols., 4to, 1778), vol. ii, p. 360.

2 Voyages and Discoveries made in the North (London, 4to, 1789), p. 287.

² Voyages and Discoveries made in the North (London, 410, 1789), p. 287.

³ Forster was evidently unacquainted with the reports, cited above, of the alleged

sighting of the island by Hall, Gillam, and Shepherd.

⁴ History of Greenland (London, 2 vols., 8vo, 1820), vol. i, p. 251. A similar (but differently worded) passage occurs in the first edition (London, 1767), vol. i,

p. 273.

Narrative of an Expedition to the East Coast of Greenland, sent by order of the King of Denmark in search of the Lost Colonies, under the Command of Captain W.A. Graah. Translated from the Danish (London, demy 8vo, 1837), p. 20.

Memoir... of the Northern Atlantic Ocean, 10th ed. (London, 8vo, 1853),

p. 508.

7 The North Atlantic Sea-Bed: Comprising a Diary of the Voyage on Board H.M.S. "Bull-Dog" in 1860 (London, demy 4to, 1862), pp. 63-67.

the centre. He adduces a number of facts which he holds to be in favour of this view, which he sums up as follows:—

"I think, . . ., that there is quite sufficient evidence in the distinct declarations of the Venetian and Norwegian navigators, coupled with those of later voyagers, who speak of a shoal or sunk land, and the remarkable confirmation afforded by the recent soundings, to establish the probability that a tract of land or an island did once exist between the 27th and 29th degrees of N. latitude, and the 59th and 60th degrees of W. longitude, and that it was either submerged suddenly by some tremendous volcanic action, or subsided slowly, leaving behind only the shoal which is now completely hidden below the surface."

Mr. C. H. Coote has also expressed² his belief that the island said to have been discovered by the crew of the buss *Emmanuel* "was, doubtless, an island now submerged", and that we have in this fact a parallel instance to that recorded by Ruysch, and shortly to be mentioned.

Finally, I may refer to the remarks of Bernard O'Reilly, who, however, cannot be regarded as an authority, as his work is known to be wholly spurious. Speaking of Frisland (the former existence of which he thinks unquestionable, and which he believes to have become submerged), he says:—3

"This spot is now marked on the charts as occupying an extensive and dangerous tract of ocean, and is named the Sunken Land of Buss. Mariners are studiously careful to avoid it. It is, in tempestuous weather, covered by a high and terrible sea. . . . The darkness in which northern history involves the fate of this island is peculiarly uninviting to accurate research. . . . The mind, however rude, in viewing the waves that still tower over its waste, must sicken at the contemplation. The site can only come within the casual glance of the wary mariner; and, in the latitude of the Sunken Land, such a man is guided by his fears to avoid the dangerous spot. Valleys of dreadful soundings and peaks of tremendous and destructive contact, buried in the ocean water, forbid an exact enquiry regarding its actual position. That the island in question has been there, . . . facts forbid us to disbelieve; whilst its fearful disappearance very naturally prevents the rarely-passing stranger from exploring the actual depths thereabouts, Quere: May not this Land of Buss, so sunken, bear some probable reference to the Old or Lost Greenland or [to] the Atlantis of the Greek writers? It would not be easy to disprove this?"

There are, as it happens, several facts which, at first sight, seem to support the theory of submergence.

In the first place, it is well known that a large portion of the Atlantic Basin (including the part in which Buss Island has been supposed to lie) forms an area of gradual subsidence. The western coasts of Ireland and the coasts of Greenland both alike afford evidence of steady, though slow, subsidence.

In the second place, it is well known that, in a by-no-meansdistant part of the Atlantic—namely, that between Iceland and

¹ It will be noticed that, by an oversight, Wallich has transposed the figures indicating latitude and longitude.

² Dictionary of National Biography (Art. "Frobisher"), vol. xx (1889), p. 283. ³ Greenland, the Adjacent Seas, and the North-West Passage, . . . (London, 4to, 1818), pp. 11-12.

Greenland—islands which are known to have formerly existed have now disappeared, probably as a result of volcanic action. on the chart of Johan Ruysch, in the Ptolemy of 1508, there is an inscription to the effect that, in the year 1456, a certain island was totally destroyed; while certain other rocky islets in the same vicinity, spoken of in the ancient Scandinavian records under the name of Gunnbjörn's Skerries, have also disappeared. Moreover, it is well known that volcanic disturbances of great severity are not infrequent in the vicinity of the former site of these skerries. The Icelandic records speak of more or less serious cruptions in the years 1210, 1219, 1222-26, 1237, 1240, 1422, 1583, 1783, 1830, and 1884. On several of these occasions, islands formerly existing off the coast of Iceland have been submerged; whilst, on other occasions, new islands which had previously no existence have appeared. On the last occasion but one named (in 1830), the "Geirfugla Skjer", off Reykjanes, on the south-west coast of Iceland—the rocks which formed the last important breedingplace of the Great Auk or Gare Fowl (Alca impennis)—were entirely submerged, and the birds were compelled to remove elsewhere.1

Furthermore, if we turn to any good chart showing the depths of the North Atlantic, we shall see that the ocean, in the vicinity of the reputed site of Buss Island, is, as a matter of fact, comparatively shallow, this being caused by the existence of a very remarkable ridge in, or local elevation of, the sea-bottom, extending from Iceland, in a south-westerly direction, quite half way to Newfoundland—that is, half way across the Atlantic at this part; but even the summit of this ridge gives, in the reputed vicinity of Buss Island, soundings of between 690 and 750 fathoms; while, a little way to the north-west and south-east of the ridge, the soundings range up to between 1170 and 1400 fathoms.

Taking this latter fact in conjunction with the undoubted evidences of subsidence and of the former disappearance of other islands, and also with the records of the old navigators whose statements we have quoted, it is very tempting to regard the ridge in the ocean bottom as the only remaining evidence of the former existence of Buss Island, if not of Frisland, which (as we have already stated) is just what Wallich has done. I am, however, quite satisfied that this cannot be done with safety. The records of the disappearance of known islands which we have quoted relate to the submergence of mere islets, of much smaller extent than that ascribed to Buss Island, to say nothing of Frisland; while the undoubted evidences of subsidence in the region in question to which I have referred do not show an alteration in elevation of more than a few feet in a century. For my part, I think it quite outside the range of

¹ See Symington Grieve's Great Auk (London, 4to, 1885), pp. 14-20.

possibility that any gradual subsidence in the bed of the Atlantic Ocean, could, in two hundred (or, even, in three hundred) years, submerge the mountain-tops of a large and mountainous island to a depth of nearly 700 fathoms, which is the least of the soundings which have been recorded over the ridge in question; while the days in which men gave credence to sudden geological "cataclysms" have long since passed away. That, within comparatively recent times, as the geologist reckons time, the ridge in question may have formed dry land is by no means improbable; but that probability has no bearing whatever upon the present question.

Taking, therefore, all the facts into consideration, I think we are justified in rejecting, as either fraudulent or erroneous, the two records stating that, on the reputed site of Buss Island, the sea-bottom was sounded upon at a depth of 100 fathoms some time before 1746, and of 59 fathoms some time before 1776. As these records form the only real evidence upon which the hypothesis of subsidence can be based, that hypothesis must, I hold, be considered quite untenable, and I have therefore no hesitation in rejecting it. The hypothesis appears to me to be not only a grossly improbable one in itself, but there seems to be no real evidence in support of it, while I believe the reputed discovery of the non-existent Buss Island may be much more satisfactorily explained in another way.

(IV.)—There remains the possibility that that which was seen by the party on board the *Emmanuel* on September 12th, 1578, was really land, but that they were in error in imagining it to be a previously unknown island. In other words: Can those on board have lost their reckoning, have sighted (without recognising) some portion of some adjacent coast, and have therefore regarded it as a previously undiscovered island?

This possibility is by no means an improbability, and, in considering it, it is not necessary to go very far afield; for, as regards what land (if any) it can have been that was sighted by Wiars and his companions, the choice lies between Iceland and Greenland alone. As a matter of fact, no other lands than these can have lain to the north and west of them (as the land they reported is said to have done), while on their homeward voyage.

As regards the former of these countries, Forster suggests, as an alternative to the idea already put forward, that the crew of the *Emmanuel* may have been pretty much out in their reckoning, and must have mistaken Iceland for quite a new country. This

¹ Voyages and Discoveries made in the North (London, demy 4to, 1786), p. 287.
2 Namely, that a real island was sighted, but that it has since been submerged see D. 102).

⁽see p. 193).

S Forster adds (loc. cit.) that they must have "formed the woods in their own imagination"; but (as the following will show) they did nothing of the kind, as no woods were in reality either observed or reported by them.

suggestion, however, does not seem to me an acceptable one. Although Iceland may, by a bare possibility, have been the real Buss Island, I do not think there is any probability whatever that it was so. Iceland lies so far to the north-east—some six or seven degrees—of any part of the route the *Emmanuel* can have sailed over with the course indicated by Wiars when on her homeward voyage, that it may be at once dismissed from further consideration.

It only remains, therefore, to consider whether some part of the southern coast of Greenland may not have been sighted, without

being recognised, and thereupon named Buss Island.

This hypothesis has been already raised by several previous writers—among others, by Sir John Richardson, who, alluding to Buss Island, says:—1

"This land was, no doubt, the southern extremity of Greenland."

Nevertheless, in spite of this tolerably definite conclusion, Sir John goes on to add (as already stated; see p. 188) that it "may have been a congeries of icebergs".

The Rev. F. Jones thinks it probable² that :—

"after crossing Davis's Straits and sighting the coast of Greenland, they [i.e., Wiars and his companions] supposed themselves off Cape Farewell, when in reality they had seen some point on the western coast far north of that Cape, and that, therefore, the supposed island was only a part of Greenland. It is [he adds] the least of the difficulties to suppose an error in their observations."

Mr. E. J. Payne (who, however, rejects the hypothesis after considering it) says³:—

"It [i.e., Buss Island] was either an immense pack of floating ice4 or merely the southern extremity of Greenland, some promontory on the western coast further northward having been mistaken for Cape Farewell. The latter hypothesis, however, does not satisfactorily harmonize with the account of Wiars, and requires us to suppose that the scamen of the Buss made a mistake in observing the latitude, to the extent of [over] two degrees. This is not impossible, but scarcely probable."

Nevertheless, I am of opinion that, if the party on board the *Emmanuel* on their return voyage to England really did see some land on their port side on the 12th of September, 1578 (as we believe they did), that land was a portion of the south-west coast of Greenland, probably just north of Cape Farewell. There does not exist any other land which they can possibly have seen on that part of their voyage and in the position described; and I believe that this view will be found to accord very well with those items in the account of Wiars as to which there is little or

¹ The Polar Regions (1861), p. 87.
2 Life of Sir Martin Frobisher, Knight (London, crown 8vo, 1878), p. 154.
3 Voyages of the Elizabethan Seamen to America; 2nd ed. (Oxford, crown 8vo, 1893), p. 192.
4 This suggestion by Mr. Payne has already been discussed (see p. 187).

no room for doubt. Wiars states that, on the 3rd of September, having escaped from their dangerous position near the entrance of Frobisher's Bay, they set sail, and that, on the evening of the 8th, they encountered "Frisland"—that is Greenland, which we know that they mistook for the Frisland of the Zeno Chart. That is to say, they spent five days in crossing Davis Strait, having been delayed, no doubt, by ice and by adverse winds, though it is stated that, when they set sail, the wind was favourable—namely, west-north-west. The narrative next states that (presumably on the same or the following day—the 9th) they "set off from the south-west poynt of Frisland". By this is no doubt meant the pronounced south-west promontory of Frisland shown on the Zeno Chart of 1558, and on the maps of the period copied from it, on which charts the promontory bears the name of "Venas". I think it most probable that the point thus described from which they set off was, in reality, that we now know as Cape The narrative states that, when they set off from Desolation. this point, the wind was "at east and east-south-east", which was of course the wind which of all others would be most unfavourable for their progress homeward. We are also told that "that night the winde veered southerly and shifted oftentimes." Nothing, therefore, is more probable than that they, to some extent, lost their reckoning during the night, and that they were driven back again by these variable and contrary winds some distance up Davis Strait without knowing it, to the west and north of Cape Desolation. Not improbably they were to some extent set back by the Polar current which runs down the east coast of Greenland, and, sweeping round Cape Farewell, runs strongly northward up the west coast for some distance. On the morning of the 10th, however, with fair weather and a favourable west-north-west wind, they again "steered south-east and by south", as the most direct course for England. Had they, at this time, been in lat. 60° or lower (as they probably thought they were), they would, with this course, have sighted no land until they reached European waters; but, being (as I believe, and as is very probable) some distance up Davis Strait, they would not clear Cape Farewell by the course they are stated to have sailed. As a matter of fact, I am inclined to believe that, sailing slowly, they came up with the coast of Greenland again, somewhere in the vicinity of that Cape, at II A.M. on the 12th—two days, that is, after starting on their southeasterly course; and that, believing themselves to be much further to the south-east than they really were, and either not knowing or not recognising the coast, they never for one moment imagined it to be a part of "Frisland" (as they called Greenland), but thought they had discovered a new island. Whatever land it really was, we are told that they saw it from a distance of "about five leagues", and that they continued in sight of it from II A.M. on the 12th until 3 P.M. on the 13th, or twenty-eight hours; after which they left it and, continuing their journey, reached the west

coast of Ireland twelve days later, namely, on the 25th.

One fact mentioned in Wiars' narrative gives strong support to the supposition that the so-called new "island" was in reality nothing more than the southern part of Greenland: namely, that there was off it an immense quantity of ice, extending from it for twenty or thirty leagues—a description which applies exactly to the land in the vicinity of Cape Farewell.

Furthermore, the statements that the "island" was accounted to be "twenty-five leagues long, and that the longest way of it [lay] south-east and north-west", agree tolerably well with what is known of the coast from the Island of Sermersok eastward to a little beyond Cape Farewell (which is that along which we suppose the buss to have sailed), although the distance is slightly less than that stated, and the trend of the coast in question is in reality slightly more east and west than it is described by Wiars. The "two harboroughs" Wiars mentions were, no doubt, two of the numerous deep fiords which exist between the two points named.

There is, however, one point mentioned by Wiars which is, at first sight, quite incompatible with this view. Wiars states explicitly that the southernmost point of the supposed new island lay in lat. $57\frac{1}{2}$ °, while Cape Farewell (with which we suppose it to be really identical) lies in 59° 47′. This would, of course, constitute a fatal objection to my theory, if it can be shown that the statement in question was beyond suspicion and made as the result of an actual observation; for, if an observation for latitude really was taken, it is hardly possible to suppose that an error of as much as, or more than, two degrees can have been made. I believe, however, that it is, for several reasons, possible to raise serious doubts as to the correctness of the figures given by Wiars.

In the first place, it should be remembered that the Buss *Emmanuel* was one of the smallest vessels of Frobisher's large fleet of fifteen sail; and it is, therefore, probable that she was very ill-provided—if provided at all—with means (such as instruments and charts) for independent navigation. Further (as has been stated), she was left behind in Bear Sound *unintentionally*, and was therefore probably even less well provided in this respect than she otherwise might have been.

In the second place, it is quite possible (and, considering the foregoing, even probable) that no actual observation was made at all, and that the figure given was merely calculated on the basis of the master's computation of their distance and direction from the imaginary Frisland, as shown upon the chart by which they were sailing, or upon one which they (or Wiars) afterwards consulted. In this case, the indication of the latitude would have no value whatever in deciding the question before us. It is, in this connection, a significant fact that "The Master accompted that

Frisland (the south-east point of it) was from him, at that instant when hee first descryed this newe Island, north-west by north fifty leagues"; but we are not told that he had sighted any south-east point of what he called "Frisland" (namely, Greenland); nor have we heard before of any such point. If, however, we turn to the Zeno Chart itself (or to any of the charts of the period which were made from it), we shall find that Frisland, as there shown, has (as well as the south-western point already alluded to) a very decided south-eastern point, which bears the name "Spirige", and is represented as lying in lat. 61° 35'. Now, fifty leagues south-east by south from this point would bring us not very far from lat. 57° 30'; and, as a matter of fact, it seems probable that this is how the latitude given in the narrative was arrived at.

Finally, however, there is the possibility that $57\frac{1}{2}^{\circ}$ is merely a clerical error or a misprint for $59\frac{1}{2}^{\circ}$. It is by no means improbable that the person who filled in the figures indicating latitude (which, it will be remembered, were at first suppressed) made an error of the kind; in which case, the mistake in the observation (if an

observation really was made) was very small.

Taking all these facts into consideration, and seeing that the choice seems to lie only between the southern part of Greenland and no land at all, I have no hesitation in endorsing the opinion that the supposed "Island of Buss" reported to have been discovered by the crew of the buss *Emmanuel* in September 1578 was in reality nothing more than the southern part of Greenland, just west of Cape Farewell, which was not recognised as such by those on board in consequence of their having lost their reckoning. At all events, this hypothesis is more in accordance than any other with the many conflicting statements concerning the matter.

But (it may be urged) Greenland does not answer in any way to Best's description of Buss Island as a "fruiteful", well-wooded, "champion" country. In reply to this objection, it is only necessary to point out that (as already stated: see p. 167) Best's statement is based on second-hand information, and that this part of it seems to be due solely to his or his informant's imagination. No reference to anything of the kind appears in Wiars's more reliable narrative.

For the reported later sightings of the non-existent island by

¹ I say that I "endorse" this opinion because it has been previously put forward (as already stated; see p. 197) by the Rev. F. Jones and Mr. E. J. Payne, though the latter rejected the hypothesis after considering it. Nevertheless, we may point out that the hypothesis, as put forward by these writers, is not tenable, because Wiars and the rest of those on board the "buss" knew nothing of the existence of Greenland in the position it really occupies, but when they sighted Greenland, imagined themselves to be off the coast of the imaginary island of Frisland. This fact (which the two writers named overlooked), entirely vitiates their, argument.

Hall, Shepherd, and Gillam, I have (as I believe) already satisfactorily accounted.

There is one other supposition upon which many writers have sought to account for the supposed former existence and subsequent disappearance of Buss Island, and which must therefore be noticed here, although (as we now know) it was from the first wholly based on misconception; for which reason, I have, of course, not included it among those hypotheses which may be

regarded as tenable.

This supposition was that Buss Island was a portion of the large (and, as we now know, imaginary) island of Frisland, which for a long period was shown on charts of the North Atlantic, the representation of it having been derived from the very wellknown—but very misleading—Zeno Chart of 1558. had really been able to find this island, though (as we have said) Frobisher thought he had visited it; and, in the course of time, a belief that it had been submerged grew up in consequence; but, when a smaller island lying in approximately the same position came to be reported, it was natural to conclude that the smaller island represented a portion of the larger which still remained unsub-That those on board the "buss" did not, when they discovered Buss Island (or thought they had done so), imagine it to be identical with Frisland is certain, and is easily explained. They had, as we know, taken the southern part of Greenland (which, relying on the Zeno Chart, they thought to be situated far to the north of its real position) for Frisland; and they sailed some fifty leagues south-eastward from what they thus took to be Frisland before discovering (or imagining they had discovered) the Island long called Buss Island. Therefore it was impossible for them to suppose the two islands to be identical in any way whatever. The voyages of Davis showed, however, that the land which Frobisher had taken to be the Island of Frisland was really the southern part of Greenland, and it was then necessary once more to find something to account for Frisland; and it was (as has been said) only natural that when a smaller island was reported to lie in about the position assigned to the lost Frisland, geographers should have concluded at once that it was a stillunsubmerged portion of the larger Frisland which had till then been overlooked.

As a matter of fact, this idea became prevalent within a comparatively short period of the reported discovery of Buss Island, and not only obtained, at a later date, very wide acceptance, but survived for nearly 200 years—almost, in fact, until geographers had come to recognise that no such island as Frisland had ever existed in the position assigned to it.

The earliest writer who imagined Buss Island and Frisland to be identical was (so far as I have been able to discover) Purchas,

who, in a side-note to the first edition (1613) of his Pilgrimage, writes thus of Frisland :- "Frisland is in length 25 leagues. The southern part of it is in the latitude of 57 degrees and one second part-Thomas Wiars." Here we see Purchas applying Wiars's description of the size and position of Buss Island to

Frisland, which proves that he regarded them as identical.

After this time, a very large number of writers, in discussing the subject, either expressed or implied their belief that Frisland and Buss Island were identical, the latter being merely the remains of the former, which was undergoing submergence. It may have been this belief which led De l'Isle to so enormously extend the • coast-line of Buss Island as shown on his chart of 1720 (see p. 178). Extracts which have already been quoted show incidentally that Messrs. Verdun de la Crenne, de Borda, and Pingré, in 1778, and Admiral Vicomte de Langle in 1865, both regarded Frisland and Buss Island as identical. A great number of similar extracts might be quoted, but it is not necessary to pursue the subject The supposition in question, having been from the outset based on a misconception, not only throws no light whatever upon the subject under discussion, but can scarcely be said to have even a secondary interest in connection with it. Buss Island, which (as I have shown) never existed, cannot have been identical with the Island of Frisland, which also (as has been shown by others) never had any existence either.

It should, perhaps, he remarked that several foreign writers (for instance, Zurla² and Maltebrun³) have spoken of "the Island of Buss or of Bry"; but this, I believe, has been due to nothing

more than a misreading of the name.

In conclusion, the writer has only to express a hope that what has been here written may be deemed to account adequately for the appearance on our charts of one of the most perplexing of the many "Phantom Islands of the Atlantic".

3 Précis de la Geogr. Univ., tome i (1810), p. 598.

¹ Purchas his Pilgrimage, 1st ed. (1613), p. 622. See also the 2nd ed. (1614), p. 740, and the 3rd ed. (1617), p. 917.

2 Dissertazione interno di Viaggi e Scoperte Settentrionale di Nicolo ed Antonio Fratelli Zeno (Venice, 8vo, 1808), pp. 81-83.

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